152 U.S. 425

LAW ASSOCIATION OF PHILADELPHIA

RECORD, CASE No. 14,273.

890

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1893.

TERM No., 254.

THE MORGAN ENVELOPE COMPANY, APPELLANT,

vs.

THE ALBANY PERFORATED WRAPPING PAPER COMPANY AND SETH WHEELER.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

FILED OCTOBER 14, 1890.

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INDEX.

	Original.	Print.
Statement	1	1
Bill of complaint	3	2
Order for subpœna to issue and to docket cause	13	8
Subpœna	14	8
Marshal's return	15	9
Præcipe for appearance for defendants	16	9
Order to enter appearance of counsel for defendants	17	9
Answer	18	10
Stipulation amending answer	25	14
Replication	26	14
Final decree	27	15
Evidence for complainant in chief	30	16
Notices to take testimony	30	16
Testimony of William J. Morton	32	17
Exhibits offered	55	33
Notary's certificate	56	34
Notice to take testimony	58	35
Testimony of Seth Wheeler	59	36
Notary's certificate	103	66
Notice to take testimony	105	67

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	Original.	Print.
Testimony of Elisha Morgan	105	68
Ormond D. Forbes	112	72
Watson E. Gibbons	116	75
Howard B. Handy	119	77
Henry A. Chapin	121	78
Exhibits offered	190	124
Notary's certificate	191	124
Evidence for complainant in rebuttal	193	126
Testimony of Oliver H. Hicks	193	126
Notary's certificate	207	135
Testimony of Robert W. Day	209	136
Stipulation as to evidence	216	141
Testimony of Charles C. Johnson	217	142
Oliver H. Hicks (recalled)	223	146
Robert W. Day (recalled)	226	148
Exhibit offered	229	150
Complainant's exhibits	230	150
Exhibit No. 6—Interference record, Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks	230	150
No. 7—Interference record, Coffey *vs.* Hicks	237	156
Affidavit K—Affidavit of Seth Wheeler, August 4, 1886	244	161
L—Declaration of Henry H. Lake, August 27, 1886	245	162
M—Notice of Morgan Envelope Company and Chicago manilla paper works, June 1, 1886	246	162
O—Letter of A. P. W. Paper Co.	247	163
R—Letter of W. J. Morton, manager, to E. V. Foster, July 23, 1887	248	164
S—Letter of G. W. Zeigler to M. E. Co., April 11, 1887	248	164
I—English letters patent No. 9572	250	165
J—English letters patent No. 3136	258	169
Evidence for defendants	267	175
Testimony of William J. Morton	267	175
Exhibits offered	268	176
Testimony of Seth Wheeler	271	177
Henry B. Smith	306	197
Henry L. Brevoort	308	199
Henry B. Richardson	329	211
Albert A. Maguire	338	216
Robert J. Coffey	355	226
Seth Wheeler (recalled)	380	241
George T. Low	383	243
Defendants' exhibits	392	248
Exhibit Richardson's Specification and Drawing	392	248
Opinion of Judge Wallace	394	249
Stipulation as to exhibits	406	255
Petition for appeal	407	256
Bond	410	257
Citation and proof of service	412	258
Clerk's certificate	413	259

1 *Statement.*

United States Circuit Court, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER. } In Equity. Docket No., 5645.

The complainant in the above-entitled cause filed its bill of complaint against the defendants herein on the 11th day of August, 1887, which bill is hereto annexed.

A subpœna to appear and answer in said cause was thereupon issued and served personally upon the defendants previous to the return day thereof, which subpœna and proof of service thereto are hereto annexed.

On the 26th day of August, 1887, the defendants duly appeared in said cause by A. J. Todd as their solicitor, and on the 3d day of October, 1887, filed their answer to the bill of complaint herein, which answer is hereto annexed.

On the 17th day of June, 1889, the defendants duly filed a stipulation to amend their said answer, which stipulation is hereto annexed.

On the 24th day of October, 1887, the complainant filed its replication to the said answer, which replication is hereto annexed.

Testimony was thereafter taken by and on behalf of the respective parties, and on the 19th and 20th days of November, 1889,
2 the said cause was brought to a hearing and argued by counsel upon pleadings and proofs before the Honorable William J. Wallace at a term of this court held at Syracuse.

A decision was duly made by said court in favor of the complainant and filed herein on the 11th day of December, 1889.

The complainant having waived the accounting prayed for in the bill of complaint, a final decree was thereupon made and entered in said cause on the 23d day of January, 1890, at a term of this court held at Albany—present, the Honorable William J. Wallace, judge—without costs, which final decree is hereto annexed.

3 *Bill of Complaint.*

In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER, Defendants. } In Equity. No. 5645.

To the honorable judges of said court:

The Morgan Envelope Company, a corporation organized under the laws of the State of Massachusetts, and having their principal

place of business at Springfield, in the State of Massachusetts, complainants, bring this, their bill of complaint against the Albany Perforated Wrapping Paper Company, a corporation organized under the laws of the State of New York, and having their principal place of business at Albany, in the county of Albany and State of New York, and Seth Wheeler, a citizen of said Albany, New York, defendants.

And thereupon your orators complain and say:

1. That heretofore, viz., on and before the first day of September, A. D. 1885, Oliver H. Hicks, of Chicago, in the county of Cook and State of Illinois, a citizen of the United States of America, was the true, original and first inventor and discoverer of a certain improved package of toilet paper, which invention was new and useful, and at the time of his application for letters patent therefor had not been in public use nor on sale for more than two years; and so being the original and first inventor thereof, he made
4 due application according to law for letters patent therefor, and on the date last aforesaid, upon his said application and in conformity to law, letters patent of the United States of America, dated September 1st, A. D. 1885, numbered 325,410, duly executed and recorded, sealed with the seal of the Patent Office and signed and countersigned by the proper officers of the Department of the Interior and of the Patent Office, respectively, according to law, were duly granted, issued and delivered to the said Oliver H. Hicks, whereby there was granted, secured or intended to be granted and secured to him, his heirs and assigns, for the term of seventeen years, from and after the said first day of September, A. D. 1885, the exclusive right to make, use and vend throughout the United States and territories thereof, the invention and discovery aforesaid, a description whereof was given in the words of said Oliver H. Hicks, in the schedule annexed to said letters patent and made a part of the same, of all which due proof will be made, if required, at the hearing of this cause.

2. That thereafter, the said Oliver H. Hicks, by an instrument in writing duly signed by him and delivered to your orators, dated the 28th day of October, A. D. 1886, and recorded on the 17th day of November, A. D. 1886, in Liber F 35, page 371, of Records of Transfers of Patents, in the United States Patent Office, assigned and conveyed to your orators the entire right, title and interest in said invention and letters patent, and all claims and demands for past infringements of said patent, as by the said writing or assignment of a duly authenticated copy of the said record thereof, here in court to be produced, will more fully and at large appear.

3. Your orators further show unto your honors, that heretofore, viz., on and before the 25th day of August, A. D. 1885, the said Oliver H. Hicks was also the true, original, and first inventor and discoverer of a certain improved toilet-paper fixture, which invention was new and useful, and at the time of his application
5 for letters patent therefor, had not been in public use nor on sale for more than two years; and so being the original and first inventor thereof, he made due application according to law for

letters patent therefor; and on the date last aforesaid, upon his said application and in conformity to law, letters patent of the United States of America, dated August 25th, A. D. 1885, numbered 325,174, duly executed and recorded, sealed with the seal of the Patent Office, and signed and countersigned by the proper officers of the Department of the Interior and of the Patent Office, respectively, according to law, were duly granted, issued and delivered to the said Oliver H. Hicks, whereby there was granted and secured, or intended to be granted and secured to him, his heirs and assigns, for the term of seventeen years from and after the 25th day of August, A. D. 1885, the exclusive right to make, use and vend throughout the United States and territories thereof, the invention and discovery aforesaid, a description whereof was given in the words of said Oliver H. Hicks in the schedule annexed to said letters patent and made a part of the same, of all which due proof will be made, if required, at the hearing of this cause.

4. That thereafter the said Oliver H. Hicks, by an instrument in writing duly signed by him and delivered to your orators, dated the 28th day of October, 1886, and recorded on the 17th day of November, A. D. 1886, in Liber F 35, page 370, of the Records of Transfers of Patents, in the United States Patent Office, assigned and conveyed to your orators the entire right, title and interest in said invention and letters patent and all claims and demands for past infringement of said patent, as by said writing or assignment or a duly authenticated copy of the said record thereof, here in court to be produced, will more fully and at large appear.

5. Your orators further show unto your honors that heretofore, viz., on and before the 15th day of February, A. D. 1887, said Oliver H. Hicks was also the true, original and first inventor and discoverer of a certain improved apparatus for holding toilet paper,
6 which invention was new and useful, and at the time of his application for letters patent therefor had not been in public use nor on sale for more than two years; and so being the original and first inventor thereof he made due application according to law for letters patent therefor, and on the date last aforesaid, upon his said application and in conformity to law, letters patent of the United States of America, dated February 15, A. D. 1887, numbered 357,993, duly executed and recorded, sealed with the seal of the Patent Office, and signed and countersigned by the proper officers of the Department of the Interior and of the Patent Office, respectively, according to law, were duly granted, issued and delivered to the said Oliver H. Hicks, whereby there was granted and secured to him, his heirs and assigns, for the term of seventeen years from and after the said 15th day of February, A. D. 1887, the exclusive right to make, use and vend throughout the United States and territories thereof, the invention and discovery aforesaid, a description whereof was given in the words of said Oliver H. Hicks in a schedule annexed to said letters patent and made a part of the same, of all which due proof will be made, if required, at the hearing of this cause.

6. That thereafter the said Oliver H. Hicks, by an instrument in writing duly signed by him and delivered to your orators, dated

the 19th day of February, A. D. 1887, and recorded on the 21st day of February, A. D. 1887, in Liber N 36, page 36, of the Records of Transfers of Patents in the United States Patent Office, assigned and conveyed to your orators the entire right, title and interest in said invention and letters patent, and all claims and demands for past infringements of said patent, as by said writing or assignment or a duly authenticated copy of the said record thereof, here in court to be produced, will more fully and at large appear.

7. Your orators further show unto your honors that they have never assigned nor granted any right, title, or interest whatever in or to any of the said inventions or discoveries aforesaid, nor
7 in or to either said letters patent Nos. 325,410, 325,174, 357,993, granted to Oliver H. Hicks, as aforesaid, but still hold and own the entire and exclusive right, title and interest in and to each and all of the same.

8. Your orators further show unto your honors that each and all of the said inventions and discoveries claimed and secured in said letters patent Nos. 325,410, 325,174, and 357,993 were and are of great utility and value; that they have each and all of them been put in practical use and successfully operated; that all of said inventions are capable of conjoint use and operation, and have been so used and operated by your orators; that your orators have made and sold large quantities of toilet paper put up in oval rolls or packages, in accordance with said letters patent No. 325,410, and have made and sold large numbers of the fixtures containing and embodying the inventions shown and claimed in said letters patent Nos. 325,174 and 357,993, and designed particularly for use in connection with the said oval rolls of paper, and have put said oval rolls of paper and said fixtures therefor into extensive and general use in this country and in foreign countries, and have, at great labor and expense, built up a large and profitable business of manufacturing and selling said paper and fixtures; that in the manufacture and sale thereof, your orators, relying upon the exclusive rights belonging to them as aforesaid, have invested a large capital in tools, stock, and other materials and means therefor, all of which, with their business aforesaid, will be greatly injured and impaired in value unless said exclusive rights are maintained and all infringements thereof are prevented; and that though the market demand throughout the United States and the territories thereof for paper and fixtures containing patented inventions has now become great, your orators are fully prepared and ready and able to supply the same.

9. Your orators further show unto your honors that, as they are advised by their counsel and believe and aver, *that* said letters patent Nos. 325,410, 325,174 and 357,993 are all and each of them
8 valid and effectual at law and in equity to secure to your orators the exclusive rights and privileges thereby severally granted; that so far as your orators have been informed and believe, the public has generally acquiesced in your orators' rights under the said several letters patent aforesaid, and the validity of no one of them has ever been seriously called in question, that your

orators are entitled to the entire and exclusive enjoyment of all the said inventions and discoveries and the said existing letters patent, and that but for the infringement hereinafter complained of your orators would have been and would now be in the undisturbed possession, use and enjoyment of said inventions, discoveries and improvements, and of said exclusive rights and privileges, and in receipt of the profits growing out of the same.

10. Your orators further show unto your honors that the defendants, the said Albany Perforated Wrapping Paper Company and the said Seth Wheeler, well knowing the premises and the rights and privileges secured to your orators as aforesaid, and in order to injure and damage your orators in their said business, and to deprive them of the exclusive enjoyment and use of the said inventions and of the profits, benefits and advantages which would otherwise accrue to them therefrom, at Albany, in the county of Albany and State of New York, and elsewhere within the United States of America, have, as your orators are informed and believe, and so charge the fact to be, confederated with other persons whose names when discovered your orators pray leave to insert by way of amendment hereto, with apt words to charge them, as defendants in this suit, to infringe your orators' aforesaid several letters patent by unlawfully making, selling and using, and endeavoring to procure other persons to unlawfully sell and use in this country to wit, in this judicial district, rolls or packages of toilet paper containing and embodying the inventions secured exclusively to your orators as aforesaid; and also by unlawfully making, selling, using, and endeavoring to procure other persons to unlawfully sell and use, in this judicial district, toilet paper
9 and fixtures containing and embodying the inventions secured exclusively to your orators, as aforesaid; also by unlawfully selling rolls or packages of toilet paper containing and embodying the inventions secured exclusively to your orators as aforesaid, for use upon and in combination with toilet-paper fixtures containing and embodying the inventions and improvements secured exclusively to your orators as aforesaid, with knowledge that said rolls or packages of toilet paper so sold were to be used in combination with such fixtures, and with the intention that they should be so used; and in pursuance of said unlawful plans the said defendants, without your orators' license or permission, and in violation of their exclusive rights aforesaid, have made and sold and used, and are, as your orators believe, now making, selling and using toilet paper and fixtures therefor containing and embodying all the improvements secured exclusively to your orators as aforesaid; that each of said fixtures with the paper therefor so made, sold, or used by the said defendants contains inventions secured to your orators by said patent No. 325,410, by said patent No. 325,174, by said patent No. 357,993, as aforesaid, and that each of said rolls or packages of paper so sold by the said defendants is intended to be used upon and is sold for use upon and in connection with fixtures owned by or to be procured by the purchaser, or supplied by the said defendants to the purchaser, and containing inventions secured to

your orators as aforesaid, and that the combination between said rolls of paper and said fixtures intended to be effected by the sale of said rolls of paper, as aforesaid, exhibits an invention covered both by said patent No. 325,410 and by said patents Nos. 325,174 and 357,993; that the said infringements, and each and all of them, were and are, to the great injury, damage, and loss to your orators, to wit, as your orators believe, the aggregate sum of ten thousand dollars ($10,000) damages; and that, as your orators believe, the defendants have realized and are realizing large gains, sav-
10 ings and profits from the unlawful manufacture, sale, and use of your orators' said inventions, as aforesaid, which ought to be ascertained and paid over to your orators, but to what amount your orators are not informed, and therefore pray that the defendants may be required to make full disclosure thereof to this honorable court.

11. Your orators further show unto your honors that they have good reason to believe, and do believe, that the defendants, the said Albany Perforated Wrapping Paper Company and the said Seth Wheeler, in defiance of your orators' exclusive rights aforesaid, intend to continue to violate and infringe all of your orators' said existing patents by continuing to manufacture, sell and use the said infringing articles, and that the said infringements, if not restrained by order of this honorable court, will work to your orators' great and irreparable damage, loss and injury, and that, for the reasons aforesaid, your orators' said exclusive rights can be adequately protected during the pendency of this suit only by means of an interlocutory injunction or injunctions to be issued out of this honorable court, and directed to the said defendants, commanding them to desist from such infringements till the further order of the court in the premises.

12. All which actings and doings of the said defendants are contrary to equity and good conscience, and tend to the manifest wrong and injury of your orators in the premises; in consideration whereof and forasmuch as your orators are remediless at common law, and can have adequate relief only in this honorable court where matters of this sort are properly cognizable and relievable. To this end, therefore, that the said defendants may, if they can, show why your orators should not have the relief hereby prayed, and that the said defendants, The Albany Perforated Wrapping Paper Company, by their proper officer or officers, and the said Seth Wheeler, according to the best and utmost of their respective knowledge, remembrance, information, and belief, but not upon oath, full, true, direct and perfect answer make to all and singular the premises; and that the said defendants may come to a
11 fair and just account of the gains, profits and savings unlawfully realized by them as aforesaid, and may be compelled by a decree of this honorable court to pay said gains, savings and profits to your orators, to pay all damages aforesaid to your orators, and to desist from further infringing your orators' rights in the premises.

May it please your honors, the premises considered, to grant unto

your orators, upon motion hereafter to be made by your orators, an interlocutory writ or writs of injunction issued by this court or by one of your honors, according to law, restraining the defendants, The Albany Perforated Wrapping Paper Company and the said Seth Wheeler, and each of their officers, clerks, attorneys, agents, servants, and workmen till the further order or decree of this honorable court in the premises from, directly or indirectly, making, selling, or using the articles hereinabove alleged to be infringements, and selling the aforesaid patented rolls or packages of paper for use upon the aforesaid patented fixtures; and also the writ or writs of injunction issued by this court, according to law, perpetually restraining and enjoining the defendants, the said Albany Perforated Wrapping Paper Company and the said Seth Wheeler, and each of their officers, clerks, attorneys, agents, servants and workmen from, directly or indirectly, making, selling or using any articles containing or embodying any of the inventions claimed in any of the claims of your orators' patents hereinabove alleged to be infringed, and from selling any of said patented rolls or packages of paper for use upon said patented fixtures, and that your orators may have such other and further relief in the premises as the nature of the case may require and to your honors may seem meet.

And may it please your honors to grant unto your orators the writ or writs of subpœna of the United States of America issuing out of and under the seal of this honorable court, directed to the said defendants, the said Albany Perforated Wrapping Paper Company and Seth Wheeler, on a day certain and under a certain penalty therein to be mentioned, to be and appear in this
12 honorable court, then and there to stand to, perform, and abide such further order, direction and decree as may be made against them.

And your orators, as in duty bound, will ever pray, etc.

[L. S.] MORGAN ENVELOPE CO.,
By ELISHA MORGAN, *President.*

GEO. B. SELDEN,
Comp'ts' Sol'r, Rochester, N. Y.
CHURCH & CHURCH,
Counsel for Complainants.

COUNTY OF HAMPDEN, }
State of Massachusetts, } *ss:*

Elisha Morgan, being duly sworn, deposes and says that he is president of The Morgan Envelope Company, the complainants in the foregoing bill named; that he has read the same and knows the contents thereof; that the said bill is true of his own knowledge, except as to those matters which are therein stated to be on information and belief, and as to those he believes it to be true.

ELISHA MORGAN.

Sworn to and subscribed before me this second day of Aug., 1887.

WILLIAM O. DAY,
[L. S.] *Notary Public.*

(Endorsed:) Bill of complaint. Filed Aug. 11, 1887. W. S. Doolittle, clerk.

13 *Order.*

In the Circuit Court of the United States for the Northern District of New York.

AUGUST 11, 1887.

Present: The Honorable William J. Wallace, judge.

MORGAN ENVELOPE CO.
vs.
ALBANY PERFORATED WRAPPING PAPER CO. and SETH WHEELER. } 5645.

On filing bill of complaint in this cause and on motion of George B. Selden, complainant's solicitor—

Ordered that a writ of subpœna do issue out of and under the seal of this court, pursuant to the prayer of said bill, and that this cause be docketed for said complainant.

14 *Writ of Subpœna.*

The President of the United States of America to Albany Perforated Wrapping Paper Company and Seth Wheeler, Greeting:

You are hereby commanded that you personally appear before the judges of the circuit court of the United States for the northern district of New York, in the second circuit, on the first Monday in September, 1887, to answer to a bill of complaint exhibited
[L. S.] against you in said court by Morgan Envelope Company, and to do further and receive whatever said court shall have considered in that behalf; and this you are not to omit under the penalty of two hundred and fifty dollars.

Witness the Honorable Morrison R. Waite, Chief Justice of the Supreme Court of the United States, at the city of Utica, in said northern district, the eleventh day of August, eighteen hundred and eighty-seven.

W. S. DOOLITTLE, *Clerk.*

GEORGE B. SELDEN,
Solicitor for Complainant.

MEMORANDUM.—The defendant is to enter his appearance in the suit above mentioned, in the clerk's office at Utica, on or before the day at which the above subpœna is returnable; otherwise the bill may be taken *pro confesso.*

W. S. DOOLITTLE, *Clerk.*

15 UNITED STATES OF AMERICA, *Northern District of New York*, } ss:

I hereby certify that on the 12th day of August, 1887, at Albany, in my district, I personally served the within writ of subpœna on the within-named defendant, Seth Wheeler, & Aurelius Smith, foreman, by showing the same to them, with the seal of the court thereon, and at the same time delivering to and leaving with them a true copy thereof.

WALTER H. BUNN, *U. S. Marshal*,
By A. CUYLER TEN EYCK, *Deputy*.

Indorsed: No. 5645. United States circuit court, northern district of New York. Morgan Envelope Company *vs.* Albany Perforated Wrapping Paper Co. & an. Equity subpœna. George B. Selden, complainant's solicitor. Filed Aug. 13, 1887. W. S. Doolittle, clerk.

16 *Præcipe for Appearance.*

NEW YORK, *August 25th*, 1887.

W. S. Doolittle, Esq., Utica, N. Y.

DEAR SIR: Will you please cause my appearance to be entered as solicitor for The Albany Perforated Wrapping Paper Co. and Seth Wheeler, defendants, in the suit of the Morgan Envelope Co., No. 5645, and geatly oblige—

Very truly yours, A. J. TODD.

Indorsed: Præcipe for appearance. Filed Aug. 26, 1887. W. S. Doolittle, clerk.

17 *Order.*

In the Circuit Court of the United States for the Northern District of New York.

AUGUST 26, 1887.

Present: The Honorable William J. Wallace, judge.

MORGAN ENVELOPE CO.
vs. } 5645.
ALBANY PERFORATED WRAPPING PAPER CO. and SETH WHEELER.

On filing præcipe in this cause and on motion of A. J. Todd, Esq.—Ordered that his appearance as solicitor for the defendants herein be, and the same is hereby, entered, and that this cause be now docketed for said defendants.

18 *Answer.*

United States Circuit Court, Northern District of New York. In Equity.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER.

The answer of The Albany Perforated Wrapping Paper Company and Seth Wheeler, the above-named defendants, to the bill of complaint of The Morgan Envelope Company, the above-named complainant.

These defendants now and at all times hereafter saving and reserving unto themselves all and all manner of benefit and advantage of exception that can or may be had or taken to the manifold errors, insufficiencies and uncertainties in the said bill of complaint contained, for answer thereto, or unto so much or such parts thereof as they are advised is material or necessary for them to make answer unto, answering say as follows:

19 That they admit doing business in manner and form as stated in the bill of complaint.

And these defendants further answering on information and belief admit that letters patent of the United States in the bill of complaint mentioned were issued to Oliver H. Hicks, as follows:

No. 325,410, dated September 1st, 1885, for package of toilet paper.

No. 325,174, dated August 25th, 1885, for toilet-paper fixture.

No. 357,993, dated February 15th, 1887, for apparatus for holding toilet paper.

But deny that said Oliver H. Hicks was the original and first inventor of said alleged improvements or of any substantial or material part thereof, or that the same were new and useful, or that the same were not in public use and on sale for more than two years as alleged in the bill of complaint.

And these defendants further answering say that they are not informed save by the said bill of complaint, and do not know whether or not the said Oliver H. Hicks sold, assigned and conveyed to the complainant the entire right, title and interest in and to the said several letters patent or alleged inventions, and all claims and demands for past infringements of said patents, as alleged in the 2nd, 4th and 6th paragraphs of the bill of complaint; or whether the complainant is now the sole and exclusive owner of said letters patent, as set forth in said bill, and can therefore neither admit nor deny the same, but leave the complainant to make such proof thereof as it may be advised.

And these defendants further answering say that they have not any knowledge or information thereof sufficient to form a belief as to the matters set forth in the 8th and 9th paragraphs of the bill of complaint, and therefore deny the same.

20 And these defendants further answering, on information and belief, allege that the things patented in and by said several letters patent, and every substantial and material part thereof claimed as new, were anterior to the supposed or any invention thereof, or of any substantial or material part thereof by the said Hicks, publicly used by divers persons in the United States, and among such persons who had such prior knowledge and who used the same as aforesaid, and the places where the same were so known and used, are as follows:

Albany Perforated Wrapping Paper Co., of Albany, New York, at said Albany and elsewhere in the United States.

Seth Wheeler, residing in said Albany and elsewhere in the United States.

Robert N. Hamilton, residing in said Albany and elsewhere in the United States.

Henry B. Richardson, residing in Amherst, Massachusetts, at said Amherst and elsewhere in the United States.

Robert J. Coffey, residing in Windsor, Vermont, at said Windsor.

J. F. Peacock, residing in New York city, at said New York.

And these defendants further answering on information and belief, allege that the things patented in and by said several letters patent, and every substantial and material part thereof claimed as new, were anterior to the supposed or any invention thereof, or of any substantial or material part thereof by said Hicks, described or shown in the following letters patent, namely:

Letters patent of the United States granted to J. F. Peacock, dated March 6th, 1883, and numbered 273,594.

Letters patent of the United States granted to E. A. Gilson, dated February 3d, 1880, and numbered 224,010.

21 Letters patent of the United States granted to B. F. Eaton, dated September 25th, 1883, and numbered 285,398.

Letters patent of the United States granted to Charles C. Johnson, dated July 29th, 1884, and numbered 302,735 and 302,736.

And these defendants, further answering on information and belief, allege that the said several alleged inventions, and every substantial and material part thereof claimed as new, had been in public use and on sale in the United States for more than two years before the application of said Hicks for the said several letters patent in the bill of complaint set forth.

And these defendants, further answering, say that the said letters patent, No. 325,410, are void for want of patentable novelty; that there is no invention involved in rolling up a continuous band of bath or toilet paper in manner substantially as has been practiced with other kinds of paper, with cloths, carpets, oil cloths, rugs, mats, and many other kinds of fabrics well known to the public; that complainant's change is merely an analogous use and obvious being, simply a change in the material wrapped up either in oval or round roll containing an internal diameter greater than the thickness of material wrapped around such diameter; further, that the claim is indefinite and uncertain, and therefore invalid, as it is for varying proportions between the thickness of the paper upon the

roll and the internal diameter of such roll, so that a roll with a certain quantity of paper upon it would only infringe when the paper was decreased by use to a certain limit, and the judgment of this honorable court is prayed thereon.

And these defendants, further answering, say that none of the claims, viz., 1 to 3 inclusive, of patent No. 325,174, and 1 to 4 of patent No. 357,993, are for a patentable subject-matter; that
22 it does not constitute invention to combine a roll of paper with a different construction of fixture than had previously been used with rolls of paper; and the judgment of this honorable court is prayed thereon.

And these defendants, further answering, deny that they have infringed any of the aforesaid several letters patent, either by making or selling, or using or endeavoring to procure others to sell or use rolls or packages, or toilet paper containing and embodying the alleged inventions secured exclusively to the complainant, as in the bill of complaint set forth, except as hereinafter set forth; or by unlawfully making, using or selling, or endeavoring to procure other persons to unlawfully use or sell toilet paper and fixtures containing and embodying the alleged inventions secured exclusively to the complainant, as in the bill of complaint is set forth; or by unlawfully selling rolls or packages of toilet paper containing or embodying the alleged invention secured exclusively to the complainant, as in the bill of complaint set forth for use upon or in combination with toilet-paper fixtures, containing and embodying the alleged inventions or improvements secured exclusively to the complainant, as in the bill of complaint set forth, with knowledge that said rolls or packages of toilet paper so sold were to be used in combination with such fixtures, and with intention that they should be so used, except as hereinafter set forth.

These defendants admit that they have sold rolls of bath or toilet paper made of a continuous strip of paper, such rolls having an internal diameter or opening greater than the thickness of the paper contained on the roll, and that they commenced to sell the same as early as the year 1878.

These defendants further admit that they have only sold rolls of paper, such rolls having an internal diameter or an opening greater than the thickness of the rolled paper, to parties who had
23 purchased complainant's patented fixtures, such paper to be used by such purchasers on such lawfully purchased fixtures; that defendants have not sold any such rolls for use upon any fixtures which were made in infringement of any of complainant's patents here in suit, nor was such paper ever so used to defendants' knowledge.

And that defendants, further answering, say that the first claim of the said patent No. 357,993, and the fourth claim of patent No. 325,174, are invalid and inoperative ones unless they are construed to be claims which include a stop having the function of a knife or cutter as well as that of a stop; that for the purpose of deceiving the public the descriptions in the specifications of said patents, so far as said claims are concerned, and the said claims themselves,

filed by the patentee Hicks, were made to contain less than the whole truth relative to his inventions or discoveries, and the defendants pray the judgment of this honorable court thereon.

And the defendants, further answering, say that the said Hicks abandoned all the supposed rights that he may have had to the claim of invention of a new bundle of paper made in and covered by the patent No. 325,410, by having a similar claim rejected in his application for letters patent, No. 357,993, and by having acquiesced in said rejections, and these defendants pray the judgment of this honorable court thereon.

And these defendants, further answering, deny that the said complainant is entitled to the relief, or any part thereof, in the said bill of complaint demanded, without this, that there is any other matter, cause or thing, in the said bill of complaint, contained material, or necessary for them to make answer unto, and not herein and hereby well and sufficiently answered, confessed, traversed and avoided or denied, is true to the knowledge and belief of these defend-
24 ants; all which matters and things these defendants are willing and ready to aver, maintain and prove as this honorable court shall direct; and these defendants pray to be hence dismissed with their reasonable costs and charges in this behalf most wrongfully sustained.

ALBANY PERFORATED WRAPPING PAPER CO.,
By SETH WHEELER, *Pres't.*
SETH WHEELER.

A. J. TODD,
Solicitor and of Counsel for Defendants.

SOUTHERN DISTRICT OF NEW YORK,)
City of New York, County of New York,) *ss:*

Seth Wheeler, being duly sworn, says that he *that he* is the president of The Albany Perforated Wrapping Paper Company one of the defendants herein; that he has read the foregoing answer and knows the contents thereof; and that the same is true of his own knowledge, except as to the matters therein stated on information and belief, and as to those matters he believes it to be true.

SETH WHEELER.

Sworn to before me, this 1st day of October, 1887.

JOHN W. KONVALINKA,
[L. S.] *Notary Public, Kings Co.*

Cert. filed in N. Y. Co.

(Endorsed:) Answer. Filed Oct. 3, 1887. W. S. Doolittle, clerk.

25 *Stipulation Amending Answer.*

United States Circuit Court, Northern District of New York.

THE MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER. } In Equity.

It is hereby stipulated and agreed that the defendants may amend the answer filed in this cause by adding thereto the following allegation:

"And these defendants, further answering, say that they are informed, and believe it to be true, that the said Oliver H. Hicks, patentee as aforesaid, was not the original and first inventor or discoverer of the said inventions and discoveries, or of any material and substantial part of the things or of the principles and combinations alleged to have been patented in and by said letters patent, Nos. 325,410 and 357,993, and mentioned in said bill of complaint; but the same things and the same principles and combinations had been previously combined by, and invented and discovered and reduced to practice by one Henry B. Richardson of Amherst, Massachusetts, prior to the time of any alleged invention or discovery thereof by said Hicks."

And that the said answer need not be again verified, and that the replication filed herein stand as a replication to the answer as so amended.

Dated December 31st, 1887.

CHURCH & CHURCH,
Counsel for Complainant.

(Indorsed:) Stipulation to amend answer. Filed June 17, 1889. W. S. Doolittle, clerk.

26 *Replication.*

In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER, Defendants. } In Equity. No. 5645.

Replication.

These repliants, saving and reserving unto themselves all and all manner of advantage of exception to the manifold insufficiencies of the said answer, for replication thereunto say that they will aver and prove their said bill to be true, certain, and sufficient in the law to be answered unto, and that the said answer of the said defendants

is uncertain, untrue, and insufficient to be replied unto by these repliants; without this, that any other matter or thing whatsoever in the said answer contained material or effectual in the law to be replied unto, confessed and avoided, traversed or denied, is true; all which matters and things these repliants are and will be ready to aver and prove as this honorable court shall direct, and humbly pray as in and by their said bill they have already prayed.

GEO. B. SELDEN,
Comp't's Sol'r, Rochester, N. Y.

Indorsed: Replication. Filed Oct. 24, 1887. W. S. Doolittle, clerk.

27 *Final Decree.*

Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER, Defendants.
} In Equity. No. 5645.

This cause having been brought to final hearing upon pleadings and proofs and having been argued by counsel for the respective parties, and the same having been duly considered by the court, it is hereby ordered, adjudged, and decreed that letters patent No. 357,993, granted to Oliver H. Hicks, dated February 15, 1887, and referred to in complainant's bill, is a good and valid patent as to the 5th claim thereof; that the said Oliver H. Hicks was the original and first inventor of the improvement described in said patent and claimed in the said 5th claim thereof; that complainants have good title to said patent, and that the said defendants have infringed the fifth claim of said patent.

It is hereby further ordered, adjudged, and decreed that a perpetual injunction issue prohibiting the said defendants and each of them, their and each of their attorneys, agents, servants, and workmen, from directly or indirectly making, using, or selling
28 fixtures, devices, or appliances containing or embodying the invention set forth in the fifth claim of said patent No. 357,993.

It is hereby further ordered, adjudged, and decreed that the defendants do not infringe any of the claims of the letters patent No. 325,174, granted to Oliver H. Hicks August 25th, 1885; that the letters patent No. 325,410, granted to said Hicks dated September 1st, 1885, are void by reason of prior use and for want of novelty, and that the bill of complaint be, and is hereby, dismissed as to said letters patent No. 325,410 and No. 325,174, and, further, that the respective parties shall pay their own costs; and the complainants having

waived the accounting prayed by their bill, this decree is hereby made final.

WM. J. WALLACE.

Form approved.

A. J. TODD, *Sol'r for Def'ts.*
CHURCH & CHURCH,
Coun. for App'l'ts.

Albany, N. Y., Jan. 21, '90.

Indorsed: Final decree. Filed January 23, 1890. W. S. Doolittle, clerk.

29 Whereupon the said pleadings, process, orders, and final decree, together with other papers in said cause, are duly annexed hereto, and this decree is duly enrolled, pursuant to the rules and practice of the court, this 23d day of January, A. D. 1890, at 3 o'clock in the afternoon.

W. S. DOOLITTLE, *Clerk.*

Indorsement on cover: In Equity. No. 5645. United States circuit court, northern district of New York. Morgan Envelope Company *vs.* Albany Perforated Wrapping Paper Co. and Seth Wheeler. Enrolled decree. Geo. B. Selden, compl't's solicitor. Filed the 23 day of Jan'y, 1890. W. S. Doolittle, clerk.

30 *Complainant's Direct Testimony.*

Notice.

In the Circuit Court of the United States for the District of Massachusetts.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
WILLIAM J. MORTON, Defendant.
} In Equity. No. —.

WASHINGTON, D. C., *November* 21, 1887.

A. J. Todd, Esq., 261 Broadway, New York city.

SIR: We hereby give you notice that on Wednesday, the 9th day of December, 1887, before Thomas H. Wakefield, Esq., a notary public, at the office of said Wakefield, No. 82 Devonshire street, Boston, Massachusetts, and between the hours of ten o'clock a. m., and four o'clock p. m., we shall proceed to take the depositions of witnesses to be used as evidence in behalf of complainants in the above-entitled cause.

The taking of depositions will be continued from day to day until completed. You are invited to be present and cross-examine.

CHURCH & CHURCH,
Counsel for Complainants.

Service acknowledged this 5th day of December, 1887.

A. J. TODD,
Counsel for Defendants.

31 In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY & SETH WHEELER, Defendants.
} In Equity. No. 5645.

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CHURCH & CHURCH,
Counsel for Complainants.

Service acknowledged this 5th day of December, 1887.

A. J. TODD,
Counsel for Defendants.

32 Circuit Court of the United States, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON.
} In Equity.

Circuit Court of the United States, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER.
} In Equity. No. 5645.

Evidence for the Complainant.

Taken pursuant to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, according to the notices annexed, before me, Thos. H. Wakefield, notary public and special examiner.

Present: Melville Church, Esq., of counsel for the complainant; A. J. Todd, Esq., of counsel for the defendants.

Deposition of William J. Morton.

Direct examination by MELVILLE CHURCH, Esq., of counsel for the complainant:

BOSTON, *Dec.* 9, 1887.

Interrogatory 1. State your name, age, residence, and occupation.

Answer. William J. Morton; age, 32; reside at Boston, Mass.; am a wholesale paper dealer.

33 Int. 2. How long have you been engaged in your present business?

A. Three years the first of next May.

Int. 3. Is your business confined to dealing in any particular kind of paper; if not, what is its scope?

A. No; I deal in anything there is any profit in.

Int. 4. Under what style or title do you do business?

A. W. J. Morton & Co.

Int. 5. Have you always done business under this style or title; if not, what other style have you used?

A. No; W. J. Morton, manager New England branch A. P. W. Paper Company; these init-als mean the Albany Perforated Wrapping Paper Company.

Int. 6. When was this last-named title adopted and when discontinued?

A. As near as I can remember, about four months ago it was adopted, and has not been discontinued.

Int. 7. Do you mean to testify that you did not hold yourself out to be the manager of the New England branch of the Albany Perforated Wrapping Paper Co. prior to August of this year.

A. I have got the former answer reversed; I mean I have done business under the title of W. J. Morton, manager New England branch A. P. W. Paper Company, since May 1, 1885, to date.

Int. 8. Please state what your relations were and are with the Albany Perforated Wrapping Paper Co.

A. A creditor, or rather a debtor.

Int. 9. I suppose you have procured from the Albany Perforated Wrapping Paper Co. quantities of water-closet or toilet paper and fixtures for use in connection therewith, and have sold it and them, or as much as you could of it and them, in this vicinity and elsewhere. Did you buy that paper and those fixtures as an ordinary jobber, or did you act as the agent of the Albany Perforated Wrapping — Co. in placing their goods and making returns to them?

A. Yes, as to the first branch of the question, as a jobber.

34 Int. 10. Were goods sent you and paid for on time; and if so, what accommodation as to time was given you?

(Objected to, as immaterial.)

A. Three months' time was given me.

Int. 11. State whether or not your arrangements with the Albany

Co. were such as that you could get goods on time and get the time for payment extended in case the goods were not sold.

(Same objection.)

A. No, sir.

Int. 12. You are the defendant in the case entitled Morgan Envelope Company *vs.* William J. Morton now pending in the district of Massachusetts, are you not?

A. Yes; I am the same W. J. Morton.

Int. 13. Please examine the package of paper now shown you, and state if you know what it is intended for and if you have ever seen packages of the same form and dimensions before.

A. It is toilet paper; I have seen packages that resemble it.

Int. 14. State if there is anything about that package of paper that would indicate to you by whom it was put up in that form.

A. No.

Int. 15. State whether or not you have ever purchased and sold packages of paper similar to that you hold in your hand.

A. I have purchased and sold paper that resembles it.

Int. 16. Was such paper put up in that form of package?

A. As near as I can tell, yes.

Int. 17. Is there any way by which you could distinguish this roll of paper before you from the other rolls of paper which you say were put up in similar packages and purchased by you?

A. None that I know of.

Int. 18. There is a mark upon this package, apparently
35 made by a stamp of some sort and in purple ink, which reads "patent," followed by something unintelligible; were the rolls which you purchased, as you have testified, thus marked?

A. I don't remember.

(The package shown the witness is here offered in evidence and marked "Compl't's Exhibit Def'ts' Roll A.; Morton Case, A. H. S. T. H. W., examiner.")

Int. 19. From whom did you purchase rolls like this exhibit?

A. I purchased rolls that looked like that exhibit from the Albany Perforated Wrapping Paper Co.

Int. 20. When did you first purchase rolls like this exhibit from the Albany company, and what quantity of them did you purchase?

A. I don't remember.

Int. 21. Your books and records will show, will they not?

A. Yes.

Int. 22. Will you please examine your books and records so as to be able to tell us after the noon adjournment when you first purchased rolls of paper like the Exhibit A, and also when you first sold any of such paper?

A. I will.

Int. 23. Have you dealt in large quantities of paper such as this, put up in this form?

A. No.

Int. 24. What do you consider a large quantity?

A. 500 to 1,000 cases.

Int. 25. Approximately how much of it have you sold?

(Objected to, as being only proper matter for an accounting; and defendants' counsel states to the counsel for complainant and to the witness that he must say that the witness, as the defendant, need not answer such a question at this stage of the suit, and that if the witness does answer the question counsel will apply to the court for an order striking it out and all similar testimony.)

A. I don't know.

Int. 26. Has all the paper you have obtained of this char-
36 acter and of this form been obtained from the Albany Perforated Wrapping Paper Co.?

A. Yes; in this form.

Int. 27. Has there been considerable demand for toilet paper in this form?

A. No.

Int. 28. Has there been any demand for it?

A. Yes.

Int. 29. And because of that demand you supplied yourself with it, did you not?

A. Yes.

Int. 30. State, if you know, the reason for putting this paper up in this particular form.

A. None, except that there is a demand for it.

Int. 31. Do you know of no object for presenting toilet paper in that form of roll?

A. No.

Int. 32. Is that form of roll not useful where the ordinary round form of roll would not be?

A. No.

Int. 33. How do you designate paper, put up in that form, in the trade?

A. "Oval, unperforated."

Int. 34. Is it known by any other name?

A. Yes.

Int. 35. What other name?

A. "Oval King."

Int. 36. Do you ever so designate in your transactions respecting it—I mean as oval King paper?

A. Yes.

Int. 37. If a purchaser comes to you to buy oval King paper, you show him paper such as this shown in Exhibit A, do you not?

A. I show him what I have that looks like that.

Int. 38. In what respect does that which you have differ from that in the exhibit before you?

A. I don't know that it differs any. I would have to compare it to find out.

37 Int. 39. The bill in the case Morgan Envelope Co. *vs.* Wm. J. Morton was filed in June, 1887. State whether or

not you had bought and sold paper like Exhibit A prior to that time.

A. Yes.

Int. 40. What had been the extent of your dealings in this paper prior to that time?

A. I can't tell; I should have to refer to the books.

Int. 41. You will please refer to your books on this point, so as to be able to tell us whether your dealings were considerable or not in this paper prior to that time.

A. I will do so.

(Noon recess to 1.30 p. m.)

Int. 42. Are you able to now tell us when it was you first procured from the Albany Perforated Wrapping Paper Co. rolls of toilet paper similar to Exhibit A, and when you first sold any such paper?

A. The first entry I could find on my books is November 1, 1886. It was, "One case oval King paper received from the Albany Perforated Wrapping Paper Co." I find I sold that case of paper on the same date.

Int. 43. Did you have an order for oval King paper before that case was purchased?

A. Yes.

Int. 44. How did your business growing out of the sale of paper such as Exhibit A, in the first six months of 1887 compare with that during this latter half of 1887?

A. I can't tell anything about that; practically I should (say) about the same.

Int. 45. I understand then that since you first took hold of this paper such as Exhibit A, your dealings in that kind of paper have been considerable, and that such dealings have grown out of a demand for paper put up in that special form of package. Are these not the facts?

A. My dealings have not been what I call considerable.

Int. 46. Have you made any particular effort, by advertisement or solicitation through agents, to introduce this particular form of paper package illustrated by Exhibit A?

38

A. No; simply sold it when we had a call for it.

Int. 47. What, if any, instructions have you received from the Albany Perforated Wrapping Paper Co. in regard to bringing into prominence this particular form of paper package?

A. No instructions.

Int. 48. Is there anybody besides the Albany Perforated Wrapping Paper Co. engaged in the manufacture and sale of packages of toilet paper put up in the form of Exhibit A?

A. I don't know.

Int. 49. Is there any other article on the market similar to Exhibit A which purports to be put up by any other concern than the Albany Perforated Wrapping Paper Co.?

A. I don't know.

Int. 50. Have you ever seen packages of toilet paper put in the

oval form of Exhibit A, or in substantially that form, bearing the label of any other manufacturer than the "Albany Perforated Wrapping Paper Co."?

A. I don't remember of any other.

Int. 51. Please examine the roll of paper which I now show you, and state if you have ever seen such a roll before on the market.

A. Yes.

Int. 52. When did you first see such a roll and where?

A. Chicago; between two and three years ago.

Int. 53. Have you not had knowledge or information that rolls, like the one last shown you, for more than a year past have been put upon the market as the manufacture of the Morgan Envelope Company, of Springfield, Mass.?

A. Yes.

Int. 54. Such a roll as the one last shown you has been known to the trade as the roll of the "Morgan Envelope Co.," has it not, for more than a year past?

A. I presume it has.

39 Int. 55. By what name has it been known in the trade?

A. I don't know, positively; I presume as oval King.

Int. 56. Why do you presume it has been known as oval King?

A. Because that package is marked "oval King."

Int. 57. Is that the sole ground of your belief?

A. Yes; and that they advertise that paper as oval King—they advertise an oval King paper.

(The roll of paper last shown the witness is here introduced in evidence to be marked "Complainant's Exhibit Complainant's Roll B."—T. H. W., examiner.)

Int. 58. What kind of fixtures, if any, were sent you by the Albany Perforated Wrapping Paper Co. with the first lot of paper which you procured from them like Exhibit A?

A. Not any.

Int. 59. Did you sell that lot of paper with fixtures?

A. No.

Int. 60. You keep in stock fixtures which rolls of paper like Exhibit A are adapted to fit, do you not?

A. No.

Int. 61. Have you not such fixtures at your establishment?

A. No; I have simply one as a sample.

Int. 62. You have kept them in stock, haven't you?

A. No.

Int. 63. What do you mean by "keeping in stock"?

A. Having any on hand; having a supply.

Int. 64. Prior to the filing of the bill in the suit against you last June, did you not have at any time on hand at your establishment fixtures with which rolls of paper such as Exhibit A were intended to be used?

A. No.

Int. 65. I understand you to testify that you have never kept on

hand at any time fixtures in connection with which paper rolls such as Exhibit A were intended to be used; am I correct?

A. Yes.

Int. 66. Have you never supplied purchasers from you of
40 paper like Exhibit A, with fixtures on which such paper was adapted to be used?

A. Yes.

Int. 67. When did you commence that practice?

A. About the time I commenced to sell the paper, I think.

Int. 68. Were these fixtures sold or given away by you?

A. Both.

Int. 69. What was your object in giving such away as you gave?

A. Because the purchasers of the paper wouldn't pay for the fixtures.

Int. 70. Such fixtures as you sold did you sell for a profit?

A. Some I did, and others I did not.

Int. 71. You always filled orders for fixtures where they were called for, did you not?

A. No.

Int. 72. Why?

A. Because I couldn't get them.

Int. 73. Did you sell paper, such as Exhibit A, to purchasers who already had fixtures?

A. Yes.

Int. 74. Describe the form of fixture that you were accustomed to sell in connection with paper such as Exhibit A.

A. Fixtures were marked "Morgan Envelope Co.," patented such and such a date; it is a fixture with two arms and a back, with a casting resembling a stove damper that is held in by a rod running through one of the arms. The casting or stove damper is run between the card-board and the centre of the paper, and by pulling at one end of the paper the roll is drawn up and brought in contact with iron teeth in the back of the fixture, which cuts a piece off and allows the roll to drop back into place.

Int. 75. Please examine the fixture I now show you, and state if you know what it represents, and whether or not it is like the fixtures sold by you in connection with paper like Exhibit A, as you have testified.

41 A. It represents a fixture for toilet paper. It is exactly like those sold by me in connection with paper like Exhibit A.

Int. 76. Prior to last June did you sell paper like Exhibit A to persons having fixtures like this one now shown you, and for use upon these fixtures?

A. I don't know with what kind of fixtures they used the paper.

Int. 77. What kind of fixtures did they say they wanted the paper for?

A. They didn't say, as I remember now.

Int. 78. I understood you to testify a while ago that you had sold paper like Exhibit A to persons who had fixtures which that paper was adapted to co-operate with. That was the fact, was it not?

A. Yes; and I say now that I presume that they had fixtures, or

they wouldn't have ordered the paper. I never went around to see what kind of fixtures they had.

Int. 79. You presume, then, that because they ordered this peculiar form of paper rolls, they had fixtures substantially like this fixture shown a few moments ago, upon which to use it. That is the fact, is it not?

A. I presume they had some kind of fixture that was satisfactory to them upon which to use it. I presume they had a fixture something like that.

Int. 80. You knew of no other fixture at that time than a fixture like this one here with which this oval paper like Exhibit A was specially adapted to operate, did you?

A. No.

(The fixture shown the witness is introduced in evidence to be marked "Compl't's Exhibit C, Fixture.—T. H. W., examiner.")

Int. 81. If I understand your testimony thus far, prior to the filing of this bill in June last you had sold quantities of paper like Exhibit A, and had supplied purchasers of said paper with fixtures like Exhibit C, giving some of said fixtures away and selling others; and you had also sold paper like Exhibit A to purchasers whom you supposed or assumed had fixtures similar to Exhibit C. Is my understanding correct?

42

A. Yes.

Int. 82. When was your attention first called to paper like Exhibit A, and to a fixture like Exhibit C, in co-operation?

A. Not quite three years ago.

Int. 83. Where was it, and who called it to your attention?

A. At Chicago; Mr. Hicks; don't know his first name.

Int. 84. Did you understand him to be the patentee or owner of said roller and fixture?

A. He claimed to be.

Int. 85. Under what circumstances did this paper and fixture come to your notice?

A. I happened in his office and he showed them to me; I knew him very well.

Int. 86. How were you impressed with the invention?

A. Favorably.

Int. 87. Did you think it would be a good thing to take hold of?

A. I don't remember just what I thought; at that time I knew nothing about the paper business.

Int. 88. Did you not make some overtures to Mr. Hicks, looking to the purchase of an interest in the invention or to the bringing of it before the public for your mutual benefit?

A. I think that Mr. Hicks knew at that time that I was looking for something to put money in and that he made overtures to me.

Int. 89. What was the reason for failure of negotiations with Mr. Hicks?

A. As I remember, he was not ready to act at that time.

Int. 90. Did you not, subsequently to the interview with Mr. Hicks, endeavor to purchase paper and fixtures from the Morgan

Envelope Co., and make some efforts to negotiate with them for the placing of their goods on the market?

43 A. Once when I was at Springfield looking after some of my trade, I stopped at the Morgan Envelope Co.'s office and inquired the price they would sell me oval King paper for.

Int. 91. Did you buy any; and, if not, why not?

A. I did not buy any, as I could buy cheaper from the Albany Perforated Wrapping Paper Co.

Int. 92. Did you tell the Morgan Envelope Co. that?

A. I don't remember.

Int. 93. Did not the question of the right of people other than the Morgan Envelope Co. to make the oval roll of paper come up during your conversation with the representative of the Morgan Envelope Co., and didn't you say that you knew all about that, or words to that effect?

A. I can't say positively anything about it; I don't remember.

Int. 94. As a matter of fact, did you not at that time know that the Morgan Envelope Co. claimed the control of the oval-roll business by virtue of patents?

A. No; I knew that Mr. Hicks claimed to me in Chicago that he was the patentee, and I saw Mr. Hicks in the Morgan Envelope Co.'s office at the time I was there, and I presumed it was on that business, but did not know positively how matters stood.

Int. 95. As a matter of fact, you were twice at the Morgan Envelope Co.'s office, were you not, once when you saw Hicks and once when you didn't?

A. I cannot now recall being there but once.

Int. 96. Was the visit to the Morgan Company's office, which you remember, before or after you had closed your arrangements with the Albany Perforated Wrapping Paper Company for the handling of their paper?

A. After, and while I was in business in Boston.

Int. 97. Will you please give me the names of those who have acted as your agents in selling paper like Exhibit A?

A. I have had no one that has sold specially this kind of paper. Those I have had are G. R. Edson, F. M. Dyer. I don't remember any others.

44 Int. 98. Was there not a man named Forbes who sold this form of paper for you?

A. Yes; on commission. I don't know his full name. It is O. F. Forbes, I think.

Int. 99. What instructions, if any, did you give those who sold this oval paper for you, directly or on commission, in regard to selling to parties who had the Morgan Co.'s fixtures in use?

A. No particular instructions, as I remember now.

Int. 100. What general instructions did you give them?

A. No general instructions except to get as much as other people got for their paper, as I remember.

Int. 101. You then, had no fixed price for your paper?

A. Yes.

Int. 102. But undersold the Morgan Envelope Co., is that the fact?

A. I don't know what their prices are, positively.

Int. 103. You knew what their prices were when you had the interview at Springfield, didn't you?

A. I knew then the prices that Mr. Morgan gave me. I don't know what his prices were to other parties; I had an idea he gave me a very high price.

Int. 104. Have you ever known the Morgan Envelope Co.'s price to be less to anybody than Mr. Morgan figured it to you?

A. Yes, I think I do; I think he sells Carter, Rice & Co. for less than he offered me.

Int. 105. What price did he offer the paper to you, and what price does he offer to Carter, Rice & Co.?

A. I don't remember the price he offered me, but think it was somewhere in the vicinity of ten dollars a case. I don't know the price he offers Carter, Rice & Co., but understand that it costs them less than mine.

Int. 106. Where did you get this information?

A. I don't remember.

Int. 107. What do you mean by the price being in the vicinity of ten dollars?

45 A. Between nine and ten.

Int. 108. From the interest you took in this oval King fixture and roll when it was exhibited to you by Mr. Hicks in Chicago, and from the fact of your negotiating with both the Morgan Envelope Co. and the Albany Perforated Wrapping Paper Co. for the handling of the invention, and particularly of the paper, I judge that you regard this oval King invention as a valuable one, and the oval King paper as a desirable thing to operate in; am I correct in my conclusions?

A. I didn't take very much interest in the matter when exhibited to me by Mr. Hicks; I didn't negotiate between the two. As I had a demand, I simply called at the Morgan Co.'s office to see at what price they would sell me. The Albany Co. offered me the goods for less, and when I was in want of paper sent them the order. I do not regard the invention as a valuable one, nor the oval King paper a desirable thing to operate in.

Adjourned to Saturday, Dec. 10, 1887, at 10 a. m.

BOSTON, *Dec.* 10, 1887.

Int. 109. Is not your opinion that the oval-roll paper is not a good thing to operate in influenced by the fact that you have no direct interest in the result of this suit against you, but have been put to considerable annoyance and inconvenience by reason of it?

(Objected to, as immaterial and as assuming what has not been testified to by the witness.)

A. No; because there is not enough demand for it.

Int. 110. In cases where rolls like Exhibit A, and fixtures like

Exhibit C, were sold from your establishment, did you or any of your assistants instruct purchasers in the manner of how to use said fixtures with said paper?

A. Not that I am aware of.

Int. 111. I understand that you have had at your estab-
46 lishment a sample fixture like Exhibit C. For what purpose did you use that?

A. Simply to—I have had that as I have had various other kinds of fixtures, to show customers the various kinds of toilet-paper fixtures there on the market.

Int. 112. And for the purpose of showing how such fixtures were used or operated?

A. Not particularly so; as a rule, people can see how fixtures are used without any explanation. If they inquire we would tell them—would inform them.

Int. 113. You did, then, sometimes use those sample fixtures for the purpose of exhibiting their operation to purchasers of paper, did you not?

A. Yes.

Int. 114. And it is likely that the fixture which you had, with which paper such as Exhibit A was intended to co-operate, was so used by you, is it not?

A. I have no particular instance in mind now; I presume it has been.

Int. 115. What other fixture, beside the one mentioned in the last question, did you ever have at your establishment for the purpose of holding an oval or flattened roll of paper?

A. A fixture called the "Universal."

Int. 116. Please describe that fixture.

A. It had a cross-piece with two arms which hang straight down, and a separate top piece; between these two arms is a piece of tin; a small rod runs through the arms connecting with the piece of tin and holds the same in place.

Int. 117. Where did you get such a fixture as that?

A. I bought the same from the Albany Perforated Wrapping Paper Co.

Int. 118. Did you get such fixtures in quantities from said Co.?

A. Yes.

Int. 119. When did you first get such fixtures?

A. About a year ago, I should think.

Int. 120. Have you ever sold any such fixtures?
47 A. Yes.

Int. 121. Have you any of them on hand now?

A. I may have a few.

Int. 122. Have you ever designated that style of fixture by any other name than the name you have given, either in presenting it to the public, or in speaking of it to purchasers, or to the Albany Co. or to the salesmen?

A. I do not recall now of ever having done so.

Int. 123. Is there no title by which you can designate that fixture than by the term "Universal"?

A. I do not know of any now; and doing a general paper and twine business, I cannot recall everything that we have handled within the last three years.

Int. 124. What kind of paper did you purchase for use upon these Universal fixtures, as you term them, and from whom did you purchase such paper?

A. Perforated paper from the Albany Perforated Wrapping Paper Co.

Int. 125. What was the form of the roll in which that perforated paper was presented; was it in the ordinary cylindrical roll or a flattened roll?

A. It was somewhat flattened when in the box, and when a round roller that we sent out with it was inserted it was a round roll.

Int. 126. And when the flat metal plate that you sent out with it was inserted, what was it?

A. More flattened than when the round roll was inserted.

Int. 127. What was the operation of the Universal fixture and the co-operating roll which you sold with it? Describe how it acted in use—I mean when the metal plate, and not the round stick, was used within the roll.

A. When the metal plate was inserted the paper would break between the first, second or third perforations. When the roller was inserted a person using it could reel off as much as they desired.

Int. 128. When the plate was inserted the quantity which you could take from the roll at any one time by simply pulling on the loose end of the paper was limited, was it not?

48 A. Yes; to one, two or three sheets.

Int. 129. The metal plate which you inserted had a bearing for the pivot pin or rod at one edge of it, did it not?

A. Yes; it had a bearing on both edges.

Int. 130. Please explain what you mean.

A. I mean that the top edge of the metal plate was curved round, so that the pin would run entirely through it.

Int. 131. The placing of the pivot along one edge of the plate instead of along the middle of the plate, and the mounting of the flattened roll of paper on said pivoted plate, caused the roll to move eccentrically, did it not, when it was turned?

A. Yes; I think it does.

Int. 132. And when the roll is turned by a pull upon the free end of paper, through a portion of a revolution, it is then stopped by its lower end coming in contact with the fixture on the wall or other surface upon which the fixture is mounted, is it not? In other words, the reaction of the roll is arrested by striking against a stop, namely, the wall or other object, is it not?

A. Yes; unless the perforation breaks before it gets that far.

Int. 133. And when the roll strikes the wall and the length of paper is torn off, the roll falls back to its first position; does it not?

A. Yes; when the paper breaks at the perforation.

Int. 134. Suppose it didn't break at the perforation, but was torn

at some other point, for instance, as close to the wall as possible, wouldn't the operation of the roll in falling back to its first position be the same?

A. I don't think it would work that way.

Int. 135. How would it work in the case supposed?

A. I don't know.

Int. 136. Have you sold any of these Universal fixtures with paper since last June?

A. Yes; with perforated paper.

Int. 137. Did you sell any of these Universal fixtures, with
49 paper for use upon them between, say, March, 1887, and June, 1887?

A. I presume there have been some sold at my store.

Int. 138. Prior to June, 1887, and between March and June, 1887, did you sell any of these Universal fixtures with unperforated paper in the form of oval rolls, like Exhibit A, for instance?

A. No.

Int. 139. Did you sell, between the dates last mentioned, any unperforated oval paper like Exhibit A to any person who had or had previously purchased from you a Universal fixture?

A. I don't know. Every day I have orders for paper and fixtures, together and separate, from my customers.

Int. 140. If an owner of a Universal fixture had between these dates applied to you for unperforated oval paper for use on such fixture, you would have supplied it to him, wouldn't you?

(Objected to, as incompetent and immaterial, as it is supposititious.)

A. No; because it wouldn't work on that fixture.

Int. 141. You continue to sell the Universal fixture and perforated oval paper for it to those who apply to you for that, don't you?

A. Yes.

Int. 142. And you have done so since you first began to deal in the Universal fixture and perforated oval paper, haven't you?

A. Yes.

Int. 143. If I understand your testimony, the reason why you have made no sales of unperforated oval paper, like Exhibit A, to those who have Universal fixtures, so called, is because said paper is too large in dimensions for use on said fixture, am I right?

(Objected to, as partly drawing the wrong conclusion from the witness' testimony, and as incompetent.)

A. I refused to sell it because it was not adapted for that fixture.

50 Int. 144. Please examine the roll and fixture which I now show you, and state what it represents, if you know.

A. It represents the Universal fixture and perforated toilet paper.

Int. 145. Who manufactures fixtures like this?

A. I don't know; I buy them from the Albany Perforated Wrapping Paper Co.

Int. 146. The Universal fixtures and the perforated oval paper, referred to in your examination, were similar to the fixture and paper just shown you, were they not?

A. Yes.

(The fixture and paper last shown the witness are here offered in evidence, and the same are marked "Compl't's Exhibit Def'ts' Fixture D," and "Compl't's Exhibit Def'ts' Roll E."—T. H. W., examiner.)

Int. 147. Do you know Henry Crannell, the shipping clerk of the Albany Perforated Wrapping Paper Co., at Albany?

A. Yes.

Int. 148. In an interference proceeding in the United States Patent Office pending in 1886, and entitled "R. J. Coffey *vs.* O. H. Hicks, subject-matter toilet-paper rolls and fixtures," the said Henry Crannell testified that you had ordered quantities of Universal fixtures and paper therefor from the Albany Perforated Wrapping Paper Co.; that he had heard you say that the goods sold well and seemed to be in good demand, and that you, among others, had renewed your orders for such goods. What have you to say as to the truth or falsity of Mr. Crannell's statements?

A. I don't recall now of ever having made such a statement, but if I did, it may have been my opinion at that time; but my subsequent experience has been that the paper and fixture are not practical, as I have not received for a long time any orders of any consequence for the same.

Int. 149. Was it not the fact that the Universal fixture and paper were put on the market in order that they might be placed in competition with the paper and fixture of the Morgan Envelope Co.?

51 A. I don't know; that is for the Albany Co. to answer; I ordered same because I thought I could sell it.

Int. 150. In the Universal fixture contrivance, as well as in the oval King contrivance manufactured by the Morgan Envelope Co., the roll of paper is given an oscillating back-and-forth movement when the paper is drawn from the roll, is it not?

A. I suppose it is.

Int. 151. And in each case the roll meets with a stop or obstruction when it is attempted to be rotated by pulling upon the paper, is it not?

A. Yes.

Int. 152. What was the object in furnishing both a round wooden core and a metal plate with bearings at its edge, as in Exhibit D, when the Universal fixture and paper were sold?

A. So that the customer could use what suited him best.

Int. 153. Did you give directions to customers in regard to the way in which these two appliances for holding the roll were to be employed?

A. Yes.

Int. 154. Who beside yourself has an interest in the firm trading

under the name or style of New England branch of Albany Perforated Wrapping Paper Co.?

A. No one.

Int. 155. Who beside yourself is interested in the firm of W. J. Morton & Co.?

A. No one.

Int. 156. Have you any contract or understanding with the Albany Pe-forated Wrapping Paper Co. which gives you any advantages in the placing of their goods in New England or in Boston, not subsisting between said company and the jobbers in Boston or New England?

(Objected to, as immaterial.)

A. I don't know.

Int. 157. Have you any contract or understanding with said company whatever; and if so, state the nature of it?

52 (Same objection.)

A. Simply an understanding that I am to sell their goods in New England.

Int. 158. Are you to have any exclusive privileges?

A. When I came here I was to have the exclusive sale of goods in New England.

Int. 159. How about it now?

A. I presume it is the same; I have never had any conversation since on the subject.

Int. 160. Was your use of their corporate name authorized by them?

(Same objection.)

A. I can't recall ever having any conversation on the subject. I may have presumed that they would have no objections, and used it without consulting them, and they never objected and I continued to do so.

Int. 161. Is there no written contract or agreement between you and the Albany Perforated Wrapping Paper Co.?

A. No contract; nothing but a verbal agreement, which was made when I first came here.

Int. 162. Mr. Wheeler, the president of the Albany Perforated Wrapping Paper Co., has been present during your examination thus far, has he not?

A. Yes.

Int. 163. Who is bearing the expense in this suit against you?

(Objected to, as immaterial.)

A. The Albany Perforated Wrapping Paper Co.

Int. 163½. Under a written agreement or a verbal understanding, merely?

A. A verbal understanding, merely.

Cross-examination by A. G. Todd, Esq., of counsel for defendants:

Cross-interrogatory 164. What is the proportion of oval
53 paper like Exhibit A sold by you as compared with what you call the round-roll paper; is it a fifth, tenth, twentieth, thirtieth, or what proportion?

Answer. The proportion is very insignificant, I would say about a fiftieth.

X Int. 164½. Having reference to your answers to Ints. 113 and 114 on the direct, were all the fixtures which you sold like Exhibit C infringing fixtures, or were they fixtures which were made by the Morgan Envelope Co., of Springfield, Mass., and bearing their stamp?

(Objected to, on the ground, first, that the counsel assumes knowledge on the part of the witness as to who made the fixtures; and secondly, that he assumes that if the fixtures were of the manufacture of the Morgan Envelope Co., their use or sale did not constitute an infringement of complainant's patents.)

A. I presume they were made by the Morgan Envelope Co., and in every respect, as far as I can remember, exactly like Exhibit C.

X Int. 165. To more perfectly shield myself against complainant's counsel's objection to the last question, I now ask whether you have any doubt in your mind as to whether those fixtures which you so sold like Exhibit C were made by the Morgan Envelope Co., the complainants in this suit?

(Objected to, as calling for mere inference or opinion of the witness, and not for any fact.)

A. I don't know; have no reason to think they were not, as they were all stamped "Morgan Envelope Co."

X Int. 166. Question repeated.

A. I don't doubt it, because they were stamped "Morgan Envelope Co., Springfield."

X Int. 167. Do you know or did you ever hear of any one who has been making these fixtures like Exhibit C, outside of the Morgan Envelope Co., of Springfield, Mass., in this market, while you have been in the paper-roll business?

A. No.

X Int. 168. You have testified that unperforated rolls like
54 Exhibit A, could not be practically used in fixtures like Exhibit D. You have also testified that the unperforated rolls of paper, like Exhibit A, were too large to be used in the Exhibit D fixture; did you ever have or demand to be manufactured unperforated paper, like Exhibit A, of a size which would fit the fixture like Exhibit D?

A. No.

X Int. 169. You have testified, in answer to Int. 146, direct, that the Universal fixtures and perforated oval paper sold by you were similar to the Compl't's Exhibits D and E; did you mean there to

testify that that was all that accompanied the paper so sold; if not, what did the whole of the fixture and paper include?

A. No; it included with that exhibit a large wooden roller to be inserted in place of the tin.

X Int. 170. And did each and all of the fixtures which you so sold, called the Universal, like Compl't's Exhibits D and E, contain a large wooden roller?

A. Yes; in every instance, I think.

X Int. 171. Will you please produce one of said large wooden rollers?

A. I will, and do.

(Counsel for defendants offers said wooden roller in evidence as "Def'ts' Exhibit Wooden Roll F.—T. H. W., examiner.")

X Int. 172. You deal, do you not, in the fixture similar to Exhibit D Fixture, but which is not called the "Universal"? If so, will you please produce one of them, together with the roll of paper which is sold with it?

A. I will, and do.

(Counsel for defendants offers in evidence said fixture and roll, and the same are marked "Def'ts' Exhibits G and H.—T. H. W., examiner.")

Direct examination resumed:

Interrogatory 173. How many cases of paper do you sell
55 of the Albany Perforated Wrapping Paper Co.'s manufacture, during a year, exclusive of oval unperforated paper?

Answer. Perhaps twenty-five hundred; one hundred rolls come in a case.

Int. 174. When did you receive the first supply of oval perforated paper from the Albany Co.?

A. About a year ago.

WILLIAM J. MORTON.

Attest: THOS. H. WAKEFIELD,
Special Examiner.

(Counsel for complainant offers in evidence letters patent of the United States, granted to O. H. Hicks, No. 325,410, dated Sept. 1, 1885, and the same is marked "Compl't's Exhibit Hicks' Roll Patent.—T. H. W., examiner."

(Also letters patent of the United States, granted to the same party, No. 325,174, dated Aug. 25, 1885, and the same is marked "Compl't's Exhibit Hicks' 1st Fixture Patent.—T. H. W., examiner."

(Also letters patent of the United States, granted to the same party, No. 357,993, dated February 15, 1887, and the same is marked "Compl't's Exhibit Hicks' 2d Fixture Patent.—T. H. W., examiner."

(Also copy of assignment from O. H. Hicks to the Morgan Envelope Company, under letters patent No. 325,410, for improvements

in package of toilet paper, and the same is marked "Compl't's Exhibit Assignment under Roll Patent.—T. H. W., examiner."

(Also copy of assignment from O. H. Hicks to the Morgan Envelope Company, under letters patent No. 325,174, and the same is marked "Compl't's Exhibit Assignment under First Fixture Patent.—T. H. W., examiner."

(Also copy of assignment from O. H. Hicks to the Morgan Envelope Company, under letters patent No. 357,993, and the same is marked "Compl't's Exhibit Assignment under Second Fixture Patent.—T. H. W., examiner.")

56 It is hereby stipulated that the evidence and exhibits taken pursuant to annexed notice, may be entrusted to the custody of Messrs. Church & Church, counsel for the complainants.

Attest: THOS. H. WAKEFIELD,
Special Examiner.

UNITED STATES OF AMERICA,)
District of Massachusetts, Suffolk,) *ss:*

At Boston, in said county, I, Thomas H. Wakefield, a notary public in and for said county, and special examiner in the foregoing-entitled causes of The Morgan Envelope Company, complainant, *vs.* William J. Morton, defendant, pending in the circuit court of the United States for the district of Massachusetts; and of The Morgan Envelope Company, complainant, *vs.* Albany Perforated Wrapping Paper Company and Seth Wheeler, defendants, pending in the circuit court of the United States for the northern district of New York, duly authorized and empowered to take such depositions and evidence as might be adduced by the complainant before me as notary public and special examiner as aforesaid, to be used in said causes, which depositions and evidence are hereto prefixed, do hereby certify that on the ninth day of December, A. D. 1887, I was attended at my office, No. 82 Devonshire street, in said Boston, by counsel for the respective parties, and by William J. Morton, a witness; that said witness, being of sound mind and lawful age, was by me first duly cautioned and sworn *and sworn* to testify the truth, the whole truth, and nothing but the truth, relating to the matters for which his deposition was about to be taken, and was then carefully examined and did thereupon depose as appears in the foregoing deposition, which deposition was reduced to writing in the presence of said witness by me, and when completed was read over to him, and signed by him as and for his deposition in my presence.

57 I further certify that due notice of the taking of said deposition was given to the opposing parties, as appears by the notices hereto prefixed, and that they attended by their counsel, A. J. Todd, Esq.

I further certify that I am not of counsel or attorney, nor connected by blood or marriage to either of the parties to said causes, nor in any way interested in the event thereof.

I further certify that in taking of said deposition and evidence, I have complied in all respects with the requirements of the sixty-

seventh rule of the Supreme Court of the United States; and I herewith transmit said evidence and deposition, with the exhibits introduced therein under my seal, to Messrs. Church & Church, counsel for the complainant, pursuant to stipulation herein.

In witness whereof I have hereunto set my hand and official seal this tenth day of December, A. D. 1887.

THOMAS H. WAKEFIELD,
[SEAL.] *Notary Public and Special Examiner.*

Examiner's fees	.....	$36 00
Witness "	.....	3 10
Marshal's "	.....	1 12

(Endorsed:) Filed Nov. 25, 1889. W. S. Doolittle, clerk.

58 In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE CO.
vs.
ALBANY PERFORATED WRAPPING PAPER CO. and SETH WHEELER. } In Equity. No. 5645.

In the Circuit Court of the United States for the District of Massachusetts.

MORGAN ENVELOPE CO.
vs.
WILLIAM J. MORTON. } In Equity. No. —.

WASHINGTON, D. C., *December* 15, 1887.

SIR: We hereby give you notice that on Thursday, the 5th of January, 1888, at the office of Stuart G. Speir, room 9, Museum building, Albany, New York, before said Speir, notary public and special examiner, or some other competent officer, at two o'clock p. m., we shall proceed to take the depositions of witnesses, to be used as evidence in behalf of the complainant, in the above-entitled causes.

The taking of depositions will be continued from day to day until completed.

You are invited to be present and cross-examine.

CHURCH & CHURCH,
Counsel for Complainant.

To A. J. Todd, Esq., 261 Broadway, New York.

Service acknowledged this — day of December, 1887.

A. J. TODD,
Counsel for Defendants.

59 In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY & SETH WHEELER, Defendants.
No. 5645. In Equity.

Circuit Court of the United States, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON.
In Equity.

Evidence for the Complainant.

Taken pursuant to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, according to the notices annexed, before me, Stuart G. Speir, notary public and special examiner.

Present: Melville Church, Esq., of counsel for the complainant; A. J. Todd, Esq., of counsel for the defendants.

Deposition of Seth Wheeler.

Direct examination by MELVILLE CHURCH, Esq., of counsel for the complainant:

ALBANY, *January* 5, 1888.

Interrogatory 1. State your name, age, residence, and occupation.

Answer Seth Wheeler; age, 49; occupation, paper manufacturer; residence, Albany.

60 Int. 2. You are one of the defendants in the cause entitled Morgan Envelope Co. *vs.* The Albany Perforated Wrapping Paper Co. and Seth Wheeler, are you not?

A. I am.

Int. 3. You are also president of the said Albany Perforated Wrapping Paper Co., are you not?

A. I am.

Int. 4. How long have you been an officer in that company?

A. About ten years.

Int. 5. Please name the other officers of said company.

A. I am also treasurer, and E. J. Wheeler, secretary. Mr. James More, R. N. Hamilton, C. H. Porter, James Gledhill and myself are the directors.

Int. 6. Please state the character of the goods manufactured by your company.

A. The manufacture of wrapping, writing, and toilet paper in rolls.

Int. 7. When did your company commence the manufacture of toilet paper in roll form?

A. In the summer or autumn of 1877, I think.

Int. 8. Was that paper perforated or unperforated paper?

A. Both.

Int. 9. Was the perforated paper manufactured in pursuance of any patent; and if so, what patent?

A. Yes; on patent granted to me July 20th, 1871.

Int. 10. Had any one to your knowledge prior to the manufacture of this perforated paper by your company manufactured said paper?

A. Not practically; something had been done in an experimental way.

Int. 11. Prior to 1885 how extensively had your company manufactured and sold this perforated toilet paper?

A. Oh, yes; to a considerable extent.

Int. 12. State whether or not, at the date mentioned (1885), there were many competitors in the market selling toilet paper in roll form.

61 A. There were several manufacturers of unperforated paper; I don't know how many.

Int. 13. What proportion of the toilet paper in roll form, furnished to trade at the date mentioned did your company supply?

A. I could not name a proportion; we manufactured it from the commencement of our business.

Int. 14. Did not, in your opinion, your company supply a very large proportion of the toilet paper put upon the market in roll form prior to 1885?

A. I should say we did.

Int. 15. Did your company not supply more toilet paper in roll form, prior to the date mentioned, than any other company of which you have knowledge?

A. I don't know.

Int. 16. What is your opinion on the subject?

A. Well, I know nothing of the business of the other manufacturers.

Int. 17. I ask you for your opinion merely, based upon what must have been your knowledge of the condition of the trade.

A. My opinion is we supplied a large proportion of it.

Int. 18. At and prior to 1885 did not the operations of your company in toilet paper in roll form constitute the most considerable part of its business?

A. It did not.

Int. 19. When did you first see a toilet fixture, similar to Complainant's Exhibit C, adapted for use/ in connection with an oval package of toilet paper similar to Exhibit B?

A. Early in 1885, I think.

Int. 20. Where and under what circumstances did you first see such a roll and fixture?

A. At the office of our company in Albany.

Int. 21. Who showed them to you?

A. It was sent to me from Chicago, I think.

Int. 22. By whom was it sent?

A. I suppose by Mr. Munson or Mr. Morton.

62 Int. 23. Give the full names and residences of the above parties.

A. Mr. L. L. Munson and Mr. W. J. Morton, both of Chicago.

Int. 24. Do you not know positively who sent you this roll and this fixture?

A. I know from their own statement to that effect.

Int. 25. Whose own statement?

A. Mr. Munson and Mr. Morton.

Int. 26. Did they send you more than one roll and one fixture; and if so, how many of either?

A. I think they sent each one; each sent a roll and fixture.

Int. 27. From whom did you first receive a roll and fixture?

A. I can't state positively; they were received both at about the same time.

Int. 28. When and from whom did you first hear of a roll and fixture like Exhibits B and C, respectively?

A. Mr. Munson and Mr. Morton both mentioned it; I couldn't say which first.

Int. 29. What was the nature of their communication about them?

A. Simply a statement to the effect that somebody in Chicago was making a new fixture to use on perforated paper.

Int 30. Did they or either of them express any opinion as to the merits of said fixture?

A. Not that I remember.

Int. 31. Did they say who invented it?

A. I think it was the name of Mr. Hicks was mentioned as the manufacturer.

Int. 32. When you first heard of this fixture and roll, Exhibits C and B, respectively, which for convenience I will hereafter refer to as the "oval King" fixture and paper, where were you?

A. I think it was first mentioned to me by Mr. Munson in Chicago; but am not positive.

63 Int. 33. Are you positive that you did not first see the oval King fixture and paper in Chicago?

A. I am.

Int. 34. I wish you would state what time in 1885 you first heard of the oval King paper and fixture and what time you first saw a sample of each.

A. I first saw it in February; as near as I can recollect.

Int. 35. Was it late or early in the month?

A. Well, I couldn't state positively that it was in the month of February; I think it was in February; whether early or late I fail to remember.

Int. 36. How long before you saw said oval King fixture and roll did you hear of them?

A. Well, I don't know whether I heard of it prior to the first of January or not.

Int. 37. Did you hear of it as early as the first of January, 1885?

A. I wouldn't say positively that I did.

Int. 38. Was the oval King fixture and roll which you first saw sent you at your request?

A. I don't know.

Int. 39. What is your impression about the matter?

A. Well, it is usual with Mr. Munson to send me anything new without request. This may have been sent in that way. I don't remember asking him to send me one of the oval King fixtures prior to its receipt.

Int. 40. Mr. Munson, to whom you refer, is connected with the concern known in Chicago as the Chicago Perforated Wrapping Paper Co., is he not?

A. He is.

Int. 41. What are the relations of that concern in Chicago with your company here in Albany?

A. The same as outlined by Mr. Morton, of Boston, in his evidence given in these cases.

Int. 42. Is the W. J. Morton, to whom you have referred as the party who sent you one of the oval King fixtures and rolls, the same W. J. Morton who has been examined in these cases?

64 A. He is.

Int. 43. Were you in Chicago in February, 1885?

A. No; I think not.

Int. 44. What makes you think so?

A. Well, that is my impression; I think I was in Albany during the month of February.

Int. 45. Where is it your custom to stop when in Chicago?

A. At the Grand Pacific or Palmer house.

Int. 46. Where did you stop in 1885, if there then?

A. Well, one of those two houses; I don't know which.

Int. 47. When you first saw this oval King fixture and roll, did you think well of them?

A. I was favorably impressed with it for the purpose intended.

Int. 48. Did you not regard it as a formidable competitor, or likely to be?

A. I did not.

Int. 49. Prior to seeing this oval King fixture, did your company ever put out a fixture embodying a weighted core plate, adapted to be moved in one direction by a pull upon the paper mounted thereon and in the opposite direction by a weight and a stop for limiting the movement?

(Objected to, as assuming that the defendants did put out a combination at some other time, which is not proved.)

A. Not that I remember.

Int. 50. After seeing the oval King paper and fixture, you invented a fixture in which a weighted core plate or roll was adapted to be moved in one direction by the pull upon the paper mounted thereon and in the opposite direction by a weight, and having a stop for limiting the movement, did you not?

A. The roll of paper used in my fixture, as I recollect, was not weighted.

Int. 51. The fixture to which I allude was in construction like Exhibit D, and intended for use in connection with a roll similar to Exhibit E; said fixture and roll constituting what is known
65 in these cases as your Universal fixture. With this understanding, I ask you if after seeing the oval King fixture you did not invent said Universal fixture?

A. The exhibit is not the fixture of my invention to which I suppose the counsel alluded. The fixture, of which the exhibit is a sample, was first made by us in 1878, I think, the same as shown, except that a center of wood was used instead of a tin plate.

Int. 52. Please describe the fixture which you did think I referred to in my former question.

A. That fixture had fixed instead of swinging arms, a cylindrical roll being used, hung eccentrically.

Int. 53. What was the operation then in use?

A. The motion of the roll was limited, which caused the paper to separate at the perforation; the fixture being designed to use our roll perforated paper.

Int. 54. In the fixture last referred to by you, upon what was the roll of paper hung?

A. A center or core of wood.

Int. 55. What was the shape of that core of wood?

A. Either round or square, or nearly so.

Int. 56. Is the fixture referred to the one that was made the subject of your application for patent in March, 1885?

A. I think so.

Int. 57. Was not the fixture, shown in the application referred to, devised by you after you had knowledge of the oval King fixture?

A. It was.

Int. 58. And was not your application for patent on said fixture put in interference with the pending application of O. H. Hicks on the oval King fixture and roll?

A. I think it was.

Int. 59. And was not the issue in said interference defined by the Patent Office to be "A weighted core plate or roll, adapted to be moved in one direction by a pull upon the paper mounted thereon, and in the opposite direction by a weight, and a stop for limiting the movement."

66 (Objected to, as the Patent Office assumption is no evidence of the matter apparently attempted to be established by the counsel. Further, the claims of the respective parties in that interference, and the declaration by the Patent Office of the subject-matter thereof, is the best evidence, and should be produced if considered material.)

A. I don't know; I dropped my case when notified of the interference.

Int. 60. And was not a judgment rendered in said interference against you, and in favor of Mr. Hicks?

(Objected to, for the reasons above stated and as immaterial, the

record itself being the best evidence of the whole proceeding, if material.)

A. I suppose it would be a judgment, as I did not appear in the case.

Int. 61. You received notice of said judgment, did you not?

(Objection continued; and further, that if anything it was a preliminary interference, and not a proposed interference in which proofs are usually taken and a decision made which could be appealed from.)

A. I don't remember of receiving any notice of the judgment.

Int. 62. You took an English patent upon the fixture for which you filed an application for patent in this country, and which application was in interference with the application of Hicks, did you not?

A. The patent was taken by the British Perforated Paper Co. in my name.

Int. 63. Please examine the copy of English patent No. 9572 of 11th of August, 1885, which I now show you, and state whether or not the fixture therein shown and described is the one for which you filed an application in this country, as before testified by you.

A. In my previous evidence in describing the fixture which was rejected or placed in interference with Hicks, I was under a misconception. I now think it was the same fixture shown in English patent 9572 of year 1885.

67 Int. 64. You were, then, wrong in stating that your said interfering application contained a round roll of paper mounted upon a square or cylindrical core and eccentrically hung, were you not?

A. I think I was.

(Counsel for complainant here offers in evidence the copy of English patent No. 9572, of 1885, and requests that the same be marked "Complainant's Exhibit I.")

Int. 65. Did your company put out any fixtures and rolls therefor similar to those pictured in English Patent Exhibit I?

A. They did.

Int. 66. In any considerable number?

A. No, not in any considerable number.

Int. 67. It was not a success from a practical point of view, was it?

A. It was not.

ALBANY, *January 6th*, 1887.

Met pursuant to adjournment.

Present, same parties as before.

Examination of Mr. WHEELER resumed:

Int. 68. In answer to the fifty-first question you stated that you first made the Universal fixture in 1878, but without the tin core plate. When did you first make a tin core plate, such as shown in the exhibit, for use in connection with the Universal fixture?

A. In the summer of 1885, I think.

Int. 69. And after the trial of the fixture for which you filed an application for patent in March, 1885?

A. To the best of my recollection, yes.

Int. 70. How extensively have you manufactured and sold the Universal fixture with metal core plate?

A. Well, I couldn't state exactly. I should say several hundred in all were sent to Chicago and Boston. How many were put in use I do not know.

Int. 71. Has your company manufactured and sold or caused to be manufactured, no more than several hundred Universal fixtures with metal core plates?

68

A. Well, I should say that fifteen hundred would cover the total amount sent out. I don't think as many as that were sent.

Int. 72. How many did you cause to be made?

A. Well, about that number. I think we have some of the tin core plates still in stock.

Int. 73. To whom did you send those Universal fixtures and metal core plates that were sent to Chicago and Boston, as you testify?

A. Messrs. Morton & Munson, before referred to.

Int. 74. Did you send any to J. H. Bishop & Co., of Minneapolis?

A. I think not.

Int. 75. What success did the Universal fixture with its metal core plate meet with in the trade?

A. It did not prove as satisfactory as the same fixture with the round or wood centre.

Int. 76. The Universal fixture embodied in its construction a weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and in the opposite direction by a weight, and a stop for limiting the movement, did it not?

A. Not in my opinion.

Int. 77. When the core plate is secured in the Universal fixture, by passing the wire pivot through the bearing at the edge of said plate and then through the arms of the fixture, the weight of the core plate below the pivotal point tends to keep it hanging in a vertical position, does it not?

A. It does.

Int. 78. And if the core plate is swung up on its pivot it will drop back to original position, will it not?

A. It will.

Int. 79. And if it is swung up sufficiently far it will meet with a stop, will it not?

A. It will not.

Int. 80. What will it meet with?

69

A. Well, there is nothing to stop the core plate when it is swung to a vertical position; it can make an entire revolution around the center of the pivot.

Int. 81. Would that be the result if the arms of the fixture hung as they ordinarily do?

A. It would.

Int. 82. Assuming that your Universal fixture is screwed to a wall

or other object, as it is intended to be, and with the pivoted arms hanging down from their bearings and the metal core plate hung by the rod or wire in the lower ends of said arms, would it be possible to rotate the plate completely on its wire pivot without raising the arms?

A. No.

Int. 83. What would prevent it?

A. The wall or partition to which the fixture was secured.

Int. 84. That wall or partition would then constitute a stop for said plate, wouldn't it?

A. Yes, in connection with the fixed arms, in the sense that it prevents the revolution, it would.

Int. 85. Assuming now that the fixture is in the same position as before, and that a roll of paper such as Exhibit E were upon the metal plate, what would be the operation if the depending end of the paper were pulled?

A. That would depend upon which way the roll was placed upon the fixture.

Int. 86. Suppose the roll were placed upon the fixture so that the loose or depending end should be next the wall or partition, what would be the result?

A. If it was a perforated roll which the fixture was intended to use, the roll would make a partial revolution outwardly from the wall, and when the roll was turned a vertical position, or nearly so, the sheet would separate at the perforation.

Int. 87. What would cause the separation of the paper when it reached the point you have mentioned?

A. The roll would strike the clasp which secures the swinging arm.

70 Int. 88. Do you refer by clasps to the portions of the fixture which constitute the bearings for the swinging arms?

A. I do.

Int. 89. Those clasps would then constitute stops for the roll; would they not; and prevent its further rotation?

A. They do prevent its further rotation.

Int. 90. And therefore stop it?

A. Yes.

Int. 91. What becomes of the roll, when the depending portion of the paper is torn off, as you have described?

A. It falls back to its normal position.

Int. 92. What causes it to do so?

A. Gravity.

Int. 93. Then, in point of fact, the Universal fixture, when equipped with the metal core plate, embodies when in operation an oscillating roll of toilet paper, which is given a movement in one direction by a pull upon the free end of the paper, and a movement in the opposite direction by gravity, and means which constitute stops to limit the motion of the roll; am I not right?

(Objected to, as assuming what the witness has not said, namely, the language, "means which constitute stops.")

A. If the clasps are propely termed stops, you are.

(Counsel for defendants further objects to both question and answer, because the word stop, contained in the claim of the patent, is not defined in the language of the specification of the patent; the element "stop" in that patent being an ingredient which has a function of severing the paper and not the function of a stop, in its popular meaning.

(Counsel for complainant calls the attention of the court to the fact that the Hicks patent, No. 357,993, states that the function of the plate M, as a stop, is as great as, if not greater than, its function as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of paper, necessarily causes the severance of the paper at some point at or near the place where the end of the detached paper leaves the body of the roll; and

71 to the further fact that while the Hicks patent, No. 325,174, is limited to the use of a knife, the said patent No. 357,993 covers in turn a stop, whether or not it be a knife.

(Counsel for defendant replies that the patentee cannot go outside of a statement of invention contained in the specification, and thereby give an enlarged meaning to the word "stop" of patent 357,993; the preamble of the specification refers, as a part of the object of the invention, to the severing of a piece of paper from the roll, and the description refers distinctly to the roll coming into contact with a knife edge to perform this severance, the paper being unperforated; that that element is designated by the letter M, and is a serrated edge, a knife edge would be clearly the equivalent; a part of the bracket serving to hold the arm of the fixture, certainly in no sense could perform this severance. What the inventor did or did not claim or describe, or claim in his patent No. 325,174 is immaterial, as each tub must stand on its own bottom.

(Counsel for complainant replies that in both of the Hicks patents referred to there is described and shown in figure 6 a modification of the patentee's invention, in which the stop for limiting the motion of the roll of paper is not a serrated edge nor any kind of an edge, but an arm on the core plate adapted to engage with one of the supporting arms of the bracket, and it was to this form of a stop as well as the knife-edge stop that the claim in patent 357,993 was directed.

(Defendants' counsel replies that if such is the position taken by complainant's counsel, then his case fails against these defendants; because they are sued for making and selling an oval roll, and it is claimed that they used an element for severing paper in the fixture employed therewith. The modification referred to is for a combination relating to a round roll of paper, and to stop its revolution pending the cutting off a desired amount of paper; no such has been put in evidence that the defendants have ever made or sold such a round-roll combination, and if they had, it is a question whether the first claim of patent 357,993 covers such a modi-

72 fication, because that modification contains another element, mainly the cutter, as a separate ingredient, without which

the combination would be inoperative; or else, to take the other horn of the dilemma, the word "stop" in the first claim refers to one or the other of the two essential elements of that modification, and is void for uncertainty.

(However, as no construction has been given by complainants of this first claim to an expert or of the modification, defendants' counsel is left in great doubt as to the charge of infringement, and therefore declines to take the assertion of complainant's counsel as evidence on the point.

(Counsel for complainant rejoins that the first claim of number 357,993 makes no mention whatever of an oval roll of toilet paper but only speaks of an oscillating roll of paper which, it is obvious, may either be oval, round, or any other shape which human ingenuity can devise, and an oscillating roll the defendants certainly use.

(Defendants' counsel says that the function of oscillation of a roll of paper certainly cannot be claimed in the suit.)

Int. 94. Do you know Henry Crannell, of Albany, N. Y.; if so, how long have you known him, and what is his occupation?

A. I know him; he is our shipping clerk, and I think he was first employed by us in 1881 or 1882, I am not certain which.

Int. 95. The said Crannell gave testimony in an interference controversy in the Patent Office between Mr. Hicks, the patentee of the oval King fixture and roll, and one Robert J. Coffey, and stated among other things that since the summer of 1885, and up to the time of his examination, to wit, March 24th, 1886, the Albany Perforated Wrapping Paper Co. had shipped large numbers of Universal fixtures having metal core plates, and that between January 1st, 1886, and the said March 24th, 1886, said company had sold about 1,400 of said fixtures. Was Mr. Crannell right or wrong in his testimony?

(Objected to, as the issue in this suit is not as to Mr.
73 Crannell's veracity nor as to an accounting of the number sold.)

A. I couldn't say without reference to our books.

Int. 96. Mr. Crannell, as shipping clerk, called upon to testify solely as to the extent of the operations of your company in Universal fixtures, was in better position to give accurate testimony than you are at this late date, was he not?

A. He had access to the same source of information as I would have.

Int. 97. But you have not taken advantage of your opportunities to post yourself on this matter, have you?

A. I haven't looked the matter up to see how many actually were sold.

Int. 98. Mr. Crannell also testified that a number of your customers had renewed their orders for said Universal fixtures and had expressed themselves as pleased with them; was that the fact?

A. Well, I don't remember particularly about that.

Int. 99. Have you the Universal fixtures now on hand for sale?

A. Well, we have the parts that go to make that fixture, that is, the cast-iron portion which constitute the original fixture used by us, and some of the tin plates; how many I do not know, as, with one exception, none have been sold to my knowledge within the past year or more.

Int. 100. You also have for sale the perforated oval rolls of paper for use on said Universal fixture, have you not?

A. I have.

Int. 101. Have you sold any of said paper since say March of last year?

A. We have.

Int. 102. For use on the Universal fixture?

A. I suppose they would be used on it.

Int. 103. You have mentioned an instance of the sale by your company of the Universal fixture within the past year; to whom was that sale made?

A. It was said to have been supplied to an agent of the Morgan Envelope Company.

74 Int. 104. I ask you to whom in fact the sale was made to which you refer.

A. I believe the goods were delivered to the Albany News Co.

Int. 105. About when was this sale to the Albany News Co. of the Universal fixture to which you have referred made?

A. In the late spring or early summer months of 1887.

Int. 106. Have you sent any of the Universal fixtures or paper therefor to Wm. J. Morton, of Boston, since March of 1887?

A. We have sent some paper, possibly fixtures; I couldn't say positively.

Int. 107. You sent them if ordered, I suppose?

A. We did.

Int. 108. When did you first begin the manufacture of rolls of perforated paper of the oval form and of the dimensions of the rolls like Exhibit E, which were made for the Universal fixture?

A. In the summer of 1885, I think.

Int. 109. The internal diameter of that roll, Exhibit E, when opened out in cylindrical form, is greater than the combined thickness of the superposed layers of paper, is it not?

A. It is.

Int. 110. Who manufactures this paper for you?

A. It is made at different mills—Bellows Falls, Putney, Moore & Arms, John Robertson & Son, F. D. Wicks.

Int. 111. Who supplied you with toilet paper in 1885?

A. John Robertson & Son supplied some of it; Wiman, Flint & Sons, and others, I think, they supplied the bulk of it.

Int. 112. Did Moore & Arms supply any that year?

A. I think not; but I won't be positive about it.

Int. 113. I wish you would examine your records, so as to be able to tell us whether or not you got tissue or toilet paper from the firm of Moore & Arms, of Bellows Falls, during the year of 1885.

75 A. I will.

Int. 114. In your transactions with Moore & Arms, with which member of the firm did you do business?

A. I usually met all the partners when I went there personally.

Int. 115. Please give the names of the partners composing that firm.

A. Moore, Arms & Thompson; their given names I don't know.

Int. 116. Is H. W. Thompson one of the partners in that concern?

A. My impression is those are the initials of Mr. Thompson's name; I am not sure.

Int. 117. In 1885 did you at any time have any conversation with Mr. H. W. Thompson, of the firm of Moore, Arms & Thompson, in regard to the oval King fixture and roll of Mr. Hicks' invention?

A. Not that I now remember.

Int. 118. Did you at any time have any conversation with Mr. Thompson on this subject; and, if so, when first, and where?

A. I think it was in the winter of 1886—that is, the winter of 1885 and 1886—and at our office.

Int. 119. Was that the first time to your recollection that any communication was had between you and Mr. Thompson on this subject?

A. I have no recollection of an earlier date; I don't remember positively of any communication before the winter of 1885–'6, but possibly there might have been.

Int. 120. How came the subject of the oval King fixture and roll to be the subject of discussion between you and Mr. Thompson?

A. I think, from the fact of our being named as a party in an interference declared between Hicks, Johnson, and ourselves.

Int. 121. What did Mr. Thompson want to know about that subject?

76 A. I think he came there to procure some of our perforated rolls.

Int. 122. What did he want them for?

A. He didn't state at that time.

Int. 123. How came the subject of the interference proceeding to be discussed?

A. I suppose from the fact of our being a party to it.

Int. 124. How did he get knowledge of that fact?

A. I don't know.

Int. 125. Please state, as nearly as you can, the substance of what was said by both parties about these proceedings or about the invention of any party to it?

A. I don't think that (at) that interview the interference was mentioned; Mr. Thompson requested that some samples of our oval rolls be sent him, which was done.

Int. 126. Where were they sent?

A. I think to him, in care of Moore, Arms & Thompson, Bellows Falls.

Int. 127. At that interview what was said about the oval King fixture of Mr. Hicks?

A. I don't remember that anything was said about them.

Int. 128. When and where did you first discuss the oval King fixture with Mr. Thompson?

A. I couldn't say now positively whether it was at a later interview at our office or in the office of Messrs. Moore, Arms & Thompson.

Int. 129. What was said, wherever it was?

A. I think Mr. Thompson wished to know what course we would pursue, with reference to the interference; I told him we did not propose to contest it.

Int. 130. What interest did Mr. Thompson represent in that interference?

A. I don't know, further than that he seemed to be interested in Mr. Johnson or his case.

Int. 131. Did he not tell you that he or the firm of Moore, Arms & Thompson was the assignee of the Johnson invention or inventions?

77 A. I don't remember that he made such a statement.

Int. 132. What did he say it was proposed to do with the Johnson interest in the interference mentioned?

A. I don't think he stated positively what they intended to do.

Int. 133. What, if any, impression did you get about the matter?

A. My impression was they were looking over the ground that they might determine what course they would pursue.

Int. 134. Did Mr. Thompson express himself at all in regard to the merits of the oval King fixture?

(Objected to, as incompetent, as being in no sense evidence against the defendants on the point inquired about.)

A. Not directly.

Int. 135. Did he inform you that he had seen the oval King fixture in Chicago?

A. He did not.

Int. 136. Did he inform you then or at any other time that after having knowledge of the oval King fixture, he had found Johnson, and caused him to file an application for a patent on a fixture?

A. No, I don't think so.

Int. 137. Have you ever heard that that was the fact?

A. I never have.

Int. 138. Were you ever in Chicago, to your knowledge, at the same time that Mr. Thompson was there?

A. No.

Int. 139. Did Mr. Thompson ever bring you, or send you, or cause to be sent you, an oval King fixture, or an oval roll of paper for use on such a fixture?

A. Not to my knowledge.

Int. 140. Is the paper that you sell in bundle form or roll form given that form by the manufacturer of the paper or by your company?

A. By our company.

Int. 141. At Albany?

A. At Albany.

78 Int. 142. Has this always been the practice?

A. It has.

Int. 143. In what form do you receive the paper from the mills?

A. In rolls.

Int. 144. Do such rolls have to be rewound or simply cut up?

A. Both rewound and cut up.

Int. 145. Does your answer reply to both perforated and unperforated paper?

A. It does.

Int. 146. When did you first begin the manufacture of paper like Exhibit A—I mean bundles or rolls of the form and dimensions of Exhibit A?

A. In 1885, I think.

Int. 147. What time in 1885?

A. In the early part of the year.

Int. 148. After you had obtained knowledge of the oval King fixture and roll?

A. After a sample was sent me.

Int. 149. By whom?

A. As before stated, by Mr. Munson or Mr. Morton.

Int. 150. Was special machinery devised for preparing the rolls in this form?

(Objected to, as wholly immaterial.)

A. No.

Int. 151. How do the dimensions of rolls like Exhibit A compare with the dimensions of the roll manufactured for the oval King fixture?

A. Well, they are the same, I suppose.

Int. 152. Your company, then, made these rolls in the form of Exhibit A in such form and proportion as that they could be used upon the oval King fixture, did it not?

(Objected to, as immaterial.)

A. It did.

Int. 153. After the oval King fixture was put upon the market there began to be a demand for paper to be used with it, did there not?

79 A. There did.

Int. 154. And your company proceeded to take part in supplying that demand by the manufacture of rolls like Exhibit A, did it not?

A. It did.

Int. 155. And did make and sell large quantities of rolls of paper put up in that form, and for that purpose, did it not?

A. We sold all we could.

Int. 176. Have your dealings in that kind of paper been extensive?

A. Not as compared with our other business.

Int. 157. To what points have you shipped the greatest quantities of paper like Exhibit A?

A. Boston and Chicago.

Int. 158. To Morton, of Boston, and Munson, of the Chicago Perforated Wrapping Paper Co., in Chicago?

A. Yes.

Int. 159. You have also sent quantities of this paper to J. H. Bishop & Co., of Minneapolis, have you not?

A. We have.

Int. 160. When did you commence shipping to Bishop & Co.?

A. In last autumn, I think.

Int. 161. Approximately how much have you shipped them?

A. Oh, I don't know how much we have shipped them.

Int. 162. Have you ever, or has your company ever, sold or given away fixtures for use in connection with rolls of paper like Exhibit A?

A. Not that I am aware of.

Int. 163. You know of no other fixture, beside fixture such as the oval King, with which paper of the size and dimension of Exhibit A is especially adapted to co-operate, do you?

A. I do not, except the fixture made in Holland.

Recess till 2.30 p. m.

80 Int. 164. Describe the fixture which you say is made in Holland.

A. The fixture is similar in action to the Hicks fixture. The roll is placed at right angles to the wall, and serrated or cutting edges forming a stop is placed both at bottom and top of the roll.

Int. 165. This Holland fixture has not been used to any extent in this country, has it?

A. The one I have is the only one I ever saw in this country.

Int. 166. How long has it been in this country?

A. I do not remember just when I got it; I think about three years ago, I should think.

Int. 167. Have you ever made application to the Morgan Envelope Co. or to Mr. Hicks for oval King fixtures?

A. I don't remember that we ever applied directly to the Morgan Envelope Co. for them; we may have done so; we never applied to Hicks for them.

Int. 168. Am I to understand from your testimony that you have never sold nor given away, with paper manufactured by you in the form of Exhibit A, any oval King fixtures, or fixtures like the oval King?

A. We have sold them, but we have never given any away, that I remember. I refer by them to oval King fixture.

Int. 169. Have you any oval King fixtures, or fixtures like them, now in stock?

A. I think we may have a few; I don't know how many.

Int. 170. Prior to the bringing of the suit against your company,

here in New York State, did your company either sell or give away any oval King fixtures, or fixtures like them?

A. I think we sold some of the oval King fixtures.

Int. 171. Did you sell any of them to W. J. Morton of Boston?

A. I think not.

Int. 172. Any to Mr. Munson, of Chicago, or to his company?

81 A. Yes; we sold oval King fixtures to Munson.

Int. 173. Any to Bishop & Co., of Minneapolis?

A. No.

Int. 174. Any to Louis Snyder's Sons, of Cincinnati?

A. No.

Int. 175. Have you ever sold any paper like Exhibit A to said last-mentioned firm?

A. I think we have.

Int. 176. Have your dealings with the latter firm been large?

A. No.

Int. 177. By what name has paper of your manufacture like Exhibit A been called by you?

A. Oval roll.

Int. 178. Have you never termed it the oval King roll?

A. Not as I am aware of; we've termed it the oval roll.

Int. 179. Where parties would order oval King paper or paper for the oval King fixture, you would furnish paper like Exhibit A, would you not?

A. Yes.

Int. 180. Can you explain the marking on the edge of that roll, Exhibit A, in purplish ink?

A. It is our patent mark.

Int. 181. What patent does that mark relate to?

A. It relates to a patent we have on reinforcing the interior of the roll with board or its equivalent; the date, I think, is March, 1883.

Int. 182. Are the rolls of paper like Exhibit A wound in cylindrical form and then flattened or brought to the oval form, or are they wound in oval form?

A. They are wound in cylindrical form, and in packing them tightly into cases become flattened.

Int. 183. Can you pack more or less paper put up in the form of Exhibit A than you can of the old round perforated roll, as manufactured by you prior to 1885, in a case of given dimensions?

A. I don't think there would be much difference, in pounds.

82 Int. 184. There would be less space between the rolls of the flattened form than between the old round rolls, would there not?

A. Well, that would depend on how tightly the round rolls were packed.

Int. 185. I mean, of course, if both were packed equally tight, and no tighter than you usually pack such goods.

A. Well, in that case a hundred oval rolls would be contained in less space than a hundred cylindrical rolls.

Int. 186. By the use of the oval rolls in connection with a fixture

having the principle of operation of the oval King fixture, is not wastage of paper prevented, and a saving effected to the consumer, as compared with the cylindrical roll mounted freely upon a pivot, so that it would revolve freely if the end was pulled?

A. If an unperforated cylindrical roll, yes.

Int. 187. How as to the perforated cylindrical roll in the hands of the ordinary user?

A. There is a difference of opinion in regard to that. My opinion is the difference would be in favor of the perforated roll.

Int. 188. Have you always entertained the same opinion?

A. I have.

Int. 189. You are quite certain that you first saw the Hicks fixture or oval King fixture in Albany, are you not?

A. I am.

Int. 190. And are equally certain that you were not in Chicago in February, 1885, and saw it there?

A. Yes.

Int. 191. And that the first fixture you saw was one sent you by either Mr. Morton or Mr. Munson?

A. Yes.

Int. 192. You took out a patent in England or caused one to be taken out there on the oval King fixture, did you not?

A. The patent was taken out by the agents of the British Perforated Paper Co., as a communication from abroad.

83 Int. 193. I hold in my hand a copy of English patent No. 3136, of 1885, for improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper, and in the formation of the said webs or bundles granted to Henry Harris Lake, as a communication from abroad, by Seth Wheeler, of Albany, N. Y., U. S. A., manufacturer; is not this the patent referred to by you in your last answer?

A. It is.

Int. 194. When did you cause the application for that patent to be made?

A. I think the communication to the British company was in February, 1885.

Int. 195. In what way did you communicate the invention to that company?

A. I sent them one of the fixtures and a roll of paper.

Int. 196. Where did you get that fixture and that roll from?

A. Well, I am not certain whether it was sent from Chicago, or whether it was our own make.

Int. 197. What instructions did you send with said roll and paper?

A. I think I advised them that it would be well for them to patent it.

Int. 198. Why?

A. As giving them a better fixture for the use of unperforated paper than any at that time in use there, so far as I know.

Int. 199. Did you send over with that roll and fixture any description of the mode or manner in which the same were to be used?

A. I think nothing more than the directions furnished by the manufacturers of the fixture here.

Int. 200. By that you mean the directions for use such as contained in the label on Exhibit B, Complainant's Roll?

A. The same, except in the name of the manufacturer.

Int. 201. I notice that the provisional specification of said
84 English patent number 3136, and which appears to have been filed in England on the 10th day of March, 1885, contained a description of the oval King fixture and roll such as was manufactured and sold by Mr. Hicks in February, 1885, while the complete specification of said patent which appears to have been filed on the 10th day of December, 1885, contains not only a description of said fixture, but also a description, and in the drawings an illustration, of the various modifications of the Hicks invention illustrated in the Hicks patent of August 25th, 1885; or, in other words, between the date of filing and provisional specification, and the date of filing of complete specification. How do you account for this?

A. I suppose I sent them a copy of the Hicks patent after it was issued here.

Int. 202. In the body of the English patent referred to, page 5, I find the following statement: "In both of the forms or modifications above described the pieces of paper torn off are of the same length as the circumference of the bundle at the time of tearing them off, and they will vary only slightly in length as the circumference of the bundle diminishes with the consumption of the paper. By thus regulating the length of the pieces of paper, the waste of paper which takes place when it is drawn from a roll in the ordinary manner is avoided." Are you prepared to certify to the correctness of this statement?

A. As referring to the unperforated roll, as I have previously stated, yes.

Int. 203. I also notice in said English patent claims as follows: "Fourth. A bundle of paper, consisting of a continuous strip or web wound or coiled into an approximately flat or oval form, and maintained in such form by a permanent central core, adapted, if desired, to receive the bearings on which the bundle revolves, substantially described. Fifth. A bundle of paper for toilet or other purposes, consisting of a continuous strip or web wound or coiled
into an approximately flat or oval form, so that its longest
85 internal diameter is equal to or greater than twice the thickness of the superposed layers of paper, and having a core forming a permanent portion thereof, substantially as described." Do you consider said claims as embodying inventions?

A. It was new in England at that time, so far as I know.

Int. 204. I ask you the same questions in regard to the first, second and third claims of said patent No. 3136.

A. I make the same reply to that.

Int. 205. Before that patent No. 3136 was granted there was filed on behalf of Mr. Hicks a protest against its grant, was there not?

A. I was so informed.

Int. 206. And it became necessary for you to make affidavit as to when and where you had derived knowledge of the invention which you thus sought to patent in England, did it not?

A. Yes.

Int. 207. And you executed such an affidavit, did you not?

A. I did.

Int. 208. Please examine the paper which I now show you and which reads as follows:

"CITY, COUNTY, AND STATE OF NEW YORK, *ss:*

"SETH WHEELER, being duly sworn according to law, deposes and says as follows: That he is a citizen of the United States and a resident of the city of Albany, in the State of New York; that he is the person who communicated from abroad the invention to Henry Harris Lake, upon which an application was made, No. 3136 of 1885.

"Deponent further says that he did not obtain a knowledge of the said invention from Oliver Hewlett Hicks, of Chicago, or of any other person; that he obtained a knowledge of the invention by seeing it in public use in the United States; that he bought one of the fixtures and rolls in the city of Chicago, Illinois, having
86 previously seen them there and elsewhere on public sale; that he immediately transmitted the same to Henry Harris Lake, with request that he apply for British letters patent as a communication from abroad.

"(Signed) SETH WHEELER.

"Sworn before me, at her Britt'an-ic majesty's consulate general, New York, this 4th day of August, A. D. 1886.

"W. R. HOARE,
"*H. B. M. Consul.*"

State whether or not you executed a paper like the above, and who prepared it for you.

A. I did; it was prepared by my counsel, Mr. A. J. Todd, of New York.

Int. 209. What did you mean by stating in this affidavit that you didn't get knowledge of the invention referred to from Oliver Hewlett Hicks, nor any other person?

A. Why, the fixture was purchased in Chicago by our representative there, which I suppose, in law, would be the same as myself, the statement being prepared by my counsel, who was familiar with the facts.

Int. 210. Did you not know at the time of making this affidavit that Mr. Hicks, the inventor of this fixture you were trying to patent in England, was also applying as inventor for a patent in England, and that your oath that you did not obtain a knowledge of the said invention from Mr. Hicks, nor from any other person, was tantamount to a declaration that you were the inventor, and that it would be so considered by the English office?

A. I did not.

Int. 211. Was it true that you had not obtained a knowledge of the invention you sought to patent from Mr. Hicks, nor from any other person, as you swore in this affidavit?

A. I believe it to be as stated in the affidavit.

Int. 212. Question repeated.

A. I believe it to be true.

87 Int. 213. If you didn't get the knowledge from Mr. Hicks, nor from any other person, where did you get it?

A. It was obtained by my representative at Chicago.

Int. 214. And you got it from your representative?

A. Yes, sir.

Int. 215. What was his name?

A. Mr. Munson.

Int. 216. Isn't he a person?

A. He is a man.

Int. 217. And a man is a person?

A. He should be considered so.

Int. 218. Then if you did not get knowledge of this invention from a person who wasn't Mr. Hicks, you swore falsely in that affidavit, didn't you?

A. Not intentionally; and I don't think I did.

Int. 219. You stated in the affidavit that you obtained a knowledge of the invention by seeing it in public use; where had you seen it in public use?

A. Through my representative, Mr. Munson, at Chicago.

Int. 220. And not with your own eyes?

A. No.

Int. 221. In your said affidavit you stated that you bought one of the fixtures and rolls in the city of Chicago; was that true?

A. My representative bought it for me.

Int. 222. Did he buy it at your request?

A. A general request to send us at any time any novelty he saw of interest to us.

Int. 223. In your affidavit you also swore that immediately upon buying the fixture and roll in Chicago you transmitted the same to Henry Harris Lake, with request that he apply for British letters patent as a communication from abroad. Did you in fact transmit said fixture and roll to Henry Harris Lake with such a request?

A. I think so—through the British Perforated Paper Co.

Int. 224. Did you instruct them to employ Lake?

A. Not as I remember; he is their solicitor there.

88 Int. 225. Then you didn't transfer the fixture and roll to Lake, but to somebody else, isn't that the fact?

A. I can't now say, positively; my impression is the fixture was transmitted through the British company, to whom we were making frequent shipments.

Int. 226. On analyzing this affidavit, then, we find that you swore falsely to each material allegation of it, because you did obtain a knowledge of the invention from a person who was not Mr. Hicks; you did not see the invention in public use in the United States; you did not buy one of the fixtures and rolls in the city of Chicago,

and you did not transmit said fixture and roll to Henry Harris Lake, and request him to apply for British patent; and all said false statements were calculated to deceive the British patent office, and did prevent the granting of a patent to Oliver Hewlett Hicks, the true and original inventor of the said roll and fixture, and is this not apparent from your testimony?

(First and last branches of the question objected to, as incompetent, as asking a conclusion of the law upon the facts assumed; the rest of the question objected to, as already answered and explained; the witness, having explained his understanding of the language of the affidavit referred to, such language not appearing to be the witness', but that of his counsel, who drew it and presented it to him for signature.

(The whole of the question is further objected to, as immaterial to the issue in this litigation; this last objection is also here interposed to all of the testimony given on this matter of the British interference, relative to the British patent, 3136, of March 10, 1885.)

A. Not as I understand the statement; I did not ask for the patent as the inventor, but as the introducer.

(Counsel for complainant here offers in evidence a copy of English patent No. 3136, and requests that the same be marked "Complainant's Exhibit J;" also copy of the affidavit of Seth Wheeler, above referred to, and requests that the same be marked "Complainant's Exhibit Affidavit K.")

Adjourned till Saturday, January 7th, 9 o'clock a. m.

89 Met pursuant to adjournment.

Int. 227. Please examine the paper which I now show you, and which reads as follows:

"*Patents, Designs, and Trade-marks; Act* 1883.

"In the Matter of the Application of Henry Harris Lake, of the firm of Haseltine, Lake & Co., patent agents, 45 Southampton buildings, in the county of Middlesex, for letters patent for an invention of improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper, and in the formation of the said webs or bundles. A communication to him from abroad by Seth Wheeler, of Albany, New York, United States of America, dated 10th March, 1885, No. 3136; and

"In the Matter of the Objection to the Grant of the said Patent by Oliver Hewlett Hicks.

"I, Henry Harris Lake, of the firm of Haseltine, Lake & Co., patent agents, 45 Southampton buildings, in the county of Middlesex, do hereby solemnly and sincerely declare as follows:

"That the invention described, illustrated, and claimed in the specification accompanying my application, No. 3136 aforesaid, was communicated to me from abroad by Seth Wheeler, of Albany, New

York, and that the instructions were received here in February, 1885; and one of the apparatus, which is the subject-matter of the said application, was received here on the 7th day of March, 1885.

"And I make the above solemn declaration, conscientiously believing the same to be true, and by virtue of the provision of the statutory declarations act, 1885.

"HENRY H. LAKE.

"Declared at No. 10 Southampton buildings, in the county of Middlesex, the 27th day of August, 1886, before me,

"JAMES HEATHER,
"*A Commissioner to Administer Oaths in the*
"*Supreme Court of Judicature in England.*"

Int. 228. Please state whether or not you or your counsel furnished the facts upon which this affidavit of Lake was based.

A. I did, I suppose.

90 Int. 229. Have you ever seen this affidavit, or a copy of it before to-day?

A. No; I don't think I have.

Int. 230. (Paper shown the witness is offered in evidence to be marked "Complainant's Exhibit L.")

Int. 231. Have the oval King fixture and rolls been put upon the market in England through your representatives or agents or connections there?

(Objected to, as immaterial.)

A. I do not know.

Int. 232. You have stated in your examination that when Mr. H. W. Thompson came to see you in the winter of 1885,-'6, it was for the purpose of getting some rolls of perforated paper, and that you furnished him some rolls; what kind of rolls were they,—like Exhibit E, prepared for use with the Universal fixture, or some other kind of perforated roll?

A. My impression is that we sent him rolls like Exhibit E, and also of the usual perforated rolls.

Int. 233. Did you furnish him any rolls like Exhibit A?

A. I don't think we did; I don't remember any.

Int. 234. When and through whom did you first learn of Rob't J. Coffey, the so-called inventor of the toilet fixture?

A. From Mr. H. W. Thompson, at an interview subsequent to the one mentioned in my evidence previously.

Int. 235. You mean subsequently to the time in the winter of 1885,-'6, when Thompson came for the rolls, do you not?

A. Yes.

Int. 236. Where did this interview take place?

A. At our office, in Albany.

Int. 237. And how came the subject of Coffey's invention to be introduced?

A. Well, I don't remember whether Mr. Thompson came in our office on any other business or not. My impression is he came in

to make a sale of paper he had in stock; at any rate the interference matter was referred to; what led to it, if any, I don't know.

91 Int. 238. Which interference do you refer to?

A. I refer to the interference as to the declaration of which we received a notice from the Patent Office.

Int. 239. Coffee was not a party to the interference in which your application and that of Mr. Hicks were involved, was he?

A. No; I think not.

Int. 240. How, then, came his name and invention to be introduced in a discussion of that interference between you and Mr. Thompson?

A. Well, Mr. Thompson mentioned it in the course of our conversation; I don't know what his purpose was in doing so further than he wanted to talk of him.

Int. 241. What did he have to say about Coffee?

A. As I remember, he told me that he was a proprietor or the keeper of a hotel in Vermont, I think; that he used an oval roll of paper in our No. 5, or Universal fixture.

Int. 242. What else did he say about him?

A. Well, I think he stated that Coffee used a flat core of wood, as I remember, instead of the usual round core which accompanied the fixture.

Int. 243. Did he state whether or not Coffey had filed an application for patent, or intended to do so?

A. I don't remember that he did; he may have said so.

Int. 244. Did you get the impression that the application had been filed by Coffey?

A. Well, I don't remember that I did at that time.

Int. 245. State as nearly as you can when this interview took place.

A. Well, it was subsequent to the interview with Thompson first mentioned; it might have been two or three months; it might have been more; I have no record.

Int. 246. Was Mr. Coffey present at this second interview with Thompson?

A. He was not.

Int. 247. Was Mr. McIntyre of New York, the patent solicitor, present?

92 A. No.

Int. 248. Have you ever met Mr. Coffey?

A. I never have.

Int. 249. Have you ever had any discussion with Mr. McIntyre about the Coffey case?

A. No.

Int. 250. You know Mr. J. N. McIntyre, do you not—the party referred to?

A. I don't think I ever saw him but once; doubt if I would recognize him if I met him.

Int. 251. When and under what circumstances did you meet him the once?

A. I called at his office on some trivial matter; I don't remember now what it was; well, I couldn't give the date exactly; it was after our shipping clerk appeared at New York as witness in the interference case in which Coffey was involved.

Int. 252. The taking of the testimony of Crannell, your shipping clerk in that interference was with your knowledge and consent, was it not?

A. Our consent was given at the request of Mr. Thompson that the testimony of Mr. Crannell might be taken in New York.

Int. 252½. You understood that Mr. Thompson or his firm had control of the Coffey application, did you not?

A. I suppose that to be the case; I knew nothing of it.

Int. 253. You were interested to have Coffey prevail over Mr. Hicks in that interference, were you not?

A. Quite the contrary.

Int. 254. When Thompson came to you and disclosed the Coffey invention to you, had you then in use Universal fixture with the metal core plate and oval perforated roll?

A. I think not.

Int. 255. You began, then, to manufacture the metal core plates and the oval perforated rolls for use upon them after you had heard of the Coffey invention; is that the fact?

A. I should say so.

93 Int. 256. The disclosure of the Coffey invention to you was what set you to work to produce the metal core plate device for use on the Universal fixture, was it not?

A. I don't know as it was.

Int. 257. Did you have no understanding with Mr. Thompson, or any one else, about the right to continue the manufacture and sale of the metal core plate device for the Universal fixture in the event of Coffey succeeding against Hicks in his contest for priority?

A. No.

Int. 258. Did you not hear, from time to time, of the progress of the litigation in the Patent Office between Coffey and Hicks?

A. I think a copy of the testimony containing Mr. Crannell's evidence was sent me at my request, and I think that Mr. Thompson at my request sent me a copy of McIntyre's last argument in the case. That, I think, comprises all I received in regard to it.

Int. 259. Did you not hear of the result of the several hearings in the Patent Office, or of either of them?

A. I believe Mr. Thompson advised me of the final result.

Int. 260. And what did he say that was?

A. Adverse to his interest, as I remember.

Int. 261. While the Coffey interference was in progress, did you buy any paper from Moore, Arms & Thompson?

A. Yes; a small amount as compared to what we had been buying of them.

Int. 262. You had been fully advised of the existence of the several patents to Hicks on the oval King fixture and roll, or of his application for such patents, before you began to operate in oval

roll paper for use on the oval King fixture, or upon the Universal fixture with the metal core plate, had you not?

(Objected to, as immaterial.)

A. I knew nothing of the application or that any patents had issued at the time we commenced such manufacture.

Int. 263. How early did you learn that you were operating
94 in or manufacturing a toilet fixture or roll, or both, claimed to have been invented by Mr. Hicks?

(Objected to, as assuming *as* what the witness has not said.)

A. Oh, after the issue of the Hicks patents of August and September of 1885.

Int. 264. You knew of the claims of Hicks as early as the interference declared between Hicks' application and your application in the summer of 1885, did you not?

(Objected to, as immaterial.)

A. We were advised of the interference, which I supposed to be on the roll and fixture.

Int. 265. The fixture and roll that you got in Chicago and sent to England to be patented to you there were, one or both of them, marked "patent applied for," were they not?

A. They may have been; I wouldn't say positively to that.

Int. 266. At the time you sent that fixture and roll abroad who did you understand claimed to be the inventor of them?

(Objected to, as immaterial.)

A. O. H. Hicks.

Int. 267. Please examine the circulars which I now show you and state whether or not you have ever seen others like them.

A. I have seen a paper like the white one, but not the green one.

Int. 268. When did you first see circulars like the first one?

(Objected to, as immaterial.)

A. Well, it was in the summer of 1886.

(The papers referred to are offered in evidence, to be marked Complainant's Exhibits M and N, respectively.)

Int. 269. I notice that the Exhibit M, the white one, contains a warning to all dealers in toilet paper of the oval roll form and gives notice of the claims of the owners of the Hicks patents of
95 August 25th, 1885, on the fixture, and September 1st, 1885, on the roll; did you not get up and circulate through the trade a reply to said circular?

(Objected to, as immaterial.)

A. I did.

Int. 270. Please examine the paper I show you, and state whether or not it is a copy of your said reply.

(Same objection.)

A. As near as I can recollect the matter in the copy is the same.

Int. 271. Did you not intend to convey the idea by the use of the following language in your said reply circular, to wit, "Our patents are of earlier date than those alleged to be infringed, we can therefore easily establish priority," that you had patents covering the oval roll like Exhibit A and like the roll made by the Morgan Envelope Co. for the oval King fixture?

A. Yes.

Int. 272. Please give the dates and numbers of said patents owned by you.

A. The patent is dated as follows: February 13th, 1883, No. 272,369.

Int. 273. You have no patent on a- oval roll, have you, except the English patent?

(Objected to, as it does not appear that the English patent claims an oval roll as such, nor does the Hicks patent claim an oval roll as such, but merely an amount of paper rolled into a bundle; so that when the bundle is flattened like any piece of dry goods, or other roll of material, the thickness of the paper shall be less than the longest diameter of the central opening or space through the bundle of paper. Therefore, the question is objected — as wholly immaterial.)

A. Our patent is on the reinforce used in the roll.

(Reply to the complainant's circular is here put in evidence, to be marked "Complainant's Exhibit O.")

Int. 274. Have you ascertained how much paper you bought of Moore, Arms & Thompson in 1885?

A. I have.

96 Int. 275. State how much, please.

A. About $1,800.00 worth.

Int. 276. Do I understand that you refuse to state how much of the oval perforated paper and how much of the oval unperforated paper you have furnished to W. J. Morton, of Boston, during the past year?

(Defendants' counsel informs complainant's counsel that the defendants' witness is not legally obliged to give the amount unless it has been first adjudicated that the patent is valid and the defendants infringe it. That such testimony would then be produced in the form of an account before the master. That counsel for defendant has advised the witness that he is at liberty to decline to answer the question.

(Counsel for complainant replies that the objection may hold good so far as the witness is called as the defendant in the case in New York, but that it does not apply so far as he is called as a witness in the Massachusetts case, in which he is not a party but an ordinary witness.

(Defendants' counsel considers the rule in practice to be the same in both of the courts in which these cases are pending, so far as his experience goes.

(Counsel for complainant, by way of rejoinder, says that the object of eliciting the testimony called for is not for the purpose of ascertaining the extent of the liability of the defendant in either the New York or the Massachusetts case, but simply to show the extent of the use by the Massachusetts defendants of the complainant's invention, and thus tend to assist in establishing the novelty and utility of the inventions covered by complainant's patents.)

A. Yes, unless advised by counsel to do so.

Int. 277. Have you sold more of such paper to Morton than you have to the Chicago parties?

(Objected to as immaterial.)

A. I think not.

Int. 278. If I understand you, you keep a stock of this oval paper on hand and supply all demands for it; is that not the fact?

97 A. It is.

Int. 279. And the parties in Chicago, Boston, Minneapolis, and Cincinnati are among your best customers?

A. They are.

Int. 280. And have sent you large orders for said goods?

A. Yes; they have sent us our largest orders for those goods.

Cross-examination by A. J. Todd, Esq.:

Cross-interrogatory 281. Having reference to your answer to the fifty-first question, you were asked if, after seeing the oval King fixture, you did not invent said Universal fixture. Now, I ask you if there was anything to invent in that Universal fixture. It is marked Exhibit D. Also state what is the difference between this fixture so marked Universal (Exhibit D) and what you term your 1878 fixture (Exhibit G). Is there really any substantial difference except in the use of name Universal upon the Exhibit D fixture, and why was such name adopted?

Answer. The change in the fixture was in the substitution of a flat metal core for a round one of wood, which, in my opinion, can hardly be called an invention. The name Universal was adopted because either our round perforated roll or a perforated roll of oval form could be used with said fixture.

X Int. 282. Does the plate perform any different function with the oval roll than does the round core with the roll when it is pressed into a cylindrical form; is not the function of both simply to keep the center of the roll in its respective form on the fixture, whether the roll is oval or cylindrical; is it anything more or less than this?

A. Only this and nothing more.

X Int. 283. In this connection, and also with reference to answer to 77th question, is it the core plate that operates to bring the oval roll into a vertical position, or is it the weight of the roll that

98 performs this function in the fixture Exhibit D used with the oval roll? I am referring to the operation of bringing the

roll into a vertical position again after such oval roll has been swung upwards.

A. It is the weight of the roll.

X Int. 284. Having reference to your answer to the 79th interrogatory, is or is not, in your opinion, the "stop" mentioned in claim 1, No. 357,993, an element for separating the paper such as a serrated or knife edged?

A. It is.

X Int. 285. In your fixture when the oval roll is used therewith, what causes the separation in such roll of the sheets?

A. It is the strain upon the web of paper at its weakened line of perforation.

X Int. 286. Having reference to the clasps in the Universal fixture which have been mentioned frequently by complainant's counsel in direct examination as stops, how long have those elements existed in this Universal fixture?

A. Since 1878, when we commenced the manufacture of the fixture.

X Int. 287. And are these elements also found in the 1878 exhibit marked Exhibit G?

A. They are.

X Int. 288. State what is the proper name for them in both of these fixtures D and G; also further state what office or function they perform.

A. They are a hasp or clasp, and form a bearing for a swinging arm.

X Int. 289. You refer, in answer to the seventieth question, to the putting on the market of these fixtures, Exhibit D and oval rolls; were they always perforated oval rolls, and had such fixtures any knife or equivalent element for the cutting of a stated length of paper?

A. They were always perforated rolls when the tin metal core plate was to be used, and had no device, serrated or otherwise, for separating the sheets.

X Int. 290. Was such fixtures, referred to in the last ques-
99 tion and answer, accompanied with wooden rolls like the roll Exhibit F?

A. That was our practice after a short trial of the metal core plate; subsequently they were sent out with all fixtures, and also to equip those which had previously been sent without them.

X Int. 291. How was this wooden core or roll F used with the oval roll of paper, similar to roll E?

A. It was placed or substituted for the metal core plate, causing the roll to assume a cylindrical form, in which form it was suspended upon the fixture in the usual manner.

X Int. 292. Do you mean that the roll was suspended upon the same fixture and similar to fixtures *similar to fixtures* D and G, and that the roll now assumed a cylindrical form instead of an oval form?

A. I do.

X Int. 293. If an unperforated roll of paper similar to complain-

ant's roll Exhibit B, the oval King, or the defendants' roll, similar to Exhibit A, was put into the Universal fixture D, could the paper be severed or separated?

A. I do not think it could be satisfactorily.

X Int. 294. Would it not have to be torn off or dragged off in strips, ribbons, or uncertain quantity?

A. Without doubt.

X Int. 295. In referring to your answer to the 65th question that your company put out fixtures like that shown in drawing of Exhibit I, (English patent No. 9572, Aug. 11th,) was the paper so put with those fixtures perforated or not?

A. A limited number with perforated rolls only.

X Int. 296. Was or was not the putting up of these fixtures merely an experiment?

A. It was.

X Int. 297. With reference to the granting of the Hicks patents in suit August and September, 1885, were these fixtures so made and put in use before or after the date of these patents?

A. Before.

100 X Int. 298. You have been referred to on the direct examination to an application which you made in March, 1885, and which was placed in interference with two cases of Johnson and one of Hicks, and which litigation you say you did not enter into; was or was not the claim in that application substantially the same as contained in Exhibit I, English patent No. 9572?

A. I think it was the same.

X Int. 299. You stated on your direct examination that you did not consider the Hicks fixture and oval roll a formidable competitor. Please give your reasons for so thinking.

A. I believed it would be found in practice that more paper would be consumed when the oval roll and fixture was used than with the use of our perforated roll and fixture.

X Int. 300. Have you ever taken sheets of paper off the oval King roll, so called, when such roll was in practical operation for toilet use; if so, will you produce some of the pieces so taken as an exhibit herein, and explain the objection to same, if any?

A. I have; here are four sheets, and the objection or disadvantage, as I look upon it, is that there is more paper than is necessary, and more than would be employed if the perforated roll was used.

X Int. 301. If an attempt is made to divide this long strip of paper into two parts, is there any difficulty encountered as far as making it practically two separate sheets for use?

A. There will be found difficulty in carrying it across, the tendency being for the tear to run with the fiber, or lengthwise of the sheet.

(The papers offered in evidence as "Exhibit Oval Roll Sheet P.")

X Int. 302. In questions 218 and 226 on the direct examination, it was assumed by counsel for complainant that you swore falsely in the affidavit Exhibit K, because you got knowledge of a subject-

matter of the patent from a person who wasn't Mr. Hicks;
101 counsel evidently basing his insinuation on the language contained in Exhibit K, "or of any other person," you having testified that you did get the fixture from some other person than Mr. Hicks, residing in Chicago, namely, your agent there. Now state what you understood when signing that affidavit by the language following Hicks, of Chicago, namely, "or of any other person."

A. I understood it to mean an intimate or some person in the confidence of Mr. Hicks who might betray that confidence.

X Int. 303. Having reference to the 226th direct question, is there, as you have explained in view of your explanation in your last answer in answer to interrogatory 226 and subsequent direct answers, any false statement whatsoever in that affidavit?

A. There is not.

X Int. 304. In answer to 210 question you were asked whether your verified statement was not tantamount to your declaration that you were the inventor; is there any statement whatsoever in that affidavit that you consider yourself the inventor of the subject-matter of that English application?

A. There is not.

X Int. 305. Having reference to the 210th question, how did you understand that patents of importation were obtained in England at date of making said affidavit Exhibit K?

A. I understood that under the English law the introducer of a novelty could obtain a patent on the article introduced?

X Int. 306. When you sent the Hicks patent over to England in order to have the complete specification and drawings made and filed for the English patent of 10th of March, 1885, No. 3136, Exhibit J, did you get any word in reply from your patent agents relative to the English government allowing a claim on the oval roll alone; if so, what was the substance of it?

(Objected to, as calling for secondary evidence.)

102 A. They advised me that a valid patent could not, in their opinion, be obtained upon the form of the roll, otherwise, the oval roll.

X Int. 307. Having reference to your answer to the 241 question on the direct, you testified that Mr. Thompson used an oval roll in your No. 5, or Universal fixture. As you subsequently testified in 254, the fixture, as a Universal one, was not then in use, please explain that answer.

A. Well, it is our custom to speak of the Universal fixture also as a No. 5, No. 5 being the original fixture first manufactured by us in 1878. As before stated, the Universal fixture differs from our original fixture only in the addition of the metal core plate. Coffey had our original, or 1878 fixture, also called a No. 5, and which I inadvertently designated Universal in speaking of it.

Redirect:

Redirect interrogatory 308. I desire to detain you but a single

question. Would you not, as a prudent man, regard it as risky to trust to but a single thickness of paper of the dimensions of what one-half of one of the pieces you have put in evidence as taken from the Hicks oval roll would give upon measurement?

Answer. I do, indeed; if of the quality and thickness of exhibit.

R. Int. 309. Is not the quality of the paper referred to excellent?

A. It is.

R. Int. 310. And do you not think that for paper of that quality and texture the piece torn from the Hicks roll at each operation (of the fixture) is of proper dimensions for use with safety?

A. I think it is longer than necessary, and to obtain a double thickness I believe that a large proportion of consumers take two long pieces rather than double it.

R. Int. 311. Is not one-half of one of these pieces of paper
103 withdrawn from the Hicks roll of about the dimensions of one sheet of paper taken from your perforated roll?

A. It is somewhat longer than a brand of which we sell the greater quantity, namely, of our hotel brand.

R. Int. 312. How much longer by measurement?

A. Our paper averages, I think, $5\frac{3}{4}$ inches long and same width as Exhibit P; half of this exhibit is $6\frac{1}{2}$ inches.

SETH WHEELER.

It is hereby stipulated that the evidence and exhibits, taken pursuant to annexed notice, may be entrusted to the custody of Messrs. Church & Church, counsel for the complainants.

UNITED STATES OF AMERICA,
Northern District of New York, County of Albany, } *ss.:*

At Albany, in said county, I, Stuart J. Speir, a notary public in and for said county, and special examiner in the foregoing-entitled causes of The Morgan Envelope Company, complainant, *vs.* Albany Perforated Wrapping Paper Company and Seth Wheeler, defendants, pending in the circuit court of the United States for the northern district of New York; and of The Morgan Envelope Company, complainant, *vs.* William J. Morton, defendant, pending in the circuit court of the United States for the district of Massachusetts, duly authorized and empowered to take such depositions and evidence as might be adduced by the complainant before me as notary public and special examiner, as aforesaid, to be used in said causes, which depositions and evidence are hereto prefixed, do hereby certify that on the 5th, 6th and 7th days of January, A. D. 1888, I was attended at my office, No. 9 Museum building, in said Albany, by counsel for the respective parties, and by Seth Wheeler, a witness; that said
witness, being of sound mind and lawful age, was by me first
104 duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth relating to the matters for which his deposition was about to be taken, and was then carefully examined, and did thereupon depose as appears in the foregoing deposition, which deposition was reduced to writing in the presence

of said witness by me, and when completed was read over to him and signed by him as and for his deposition in my presence.

I further certify that due notice of the taking of said deposition was given the opposing parties as appears by the notices hereto prefixed, and that they attended, by their counsel, A. J. Todd, Esq.

I further certify that I am not of counsel or attorney, nor connected by blood or marriage to either of the parties to said causes, nor in any way interested in the event thereof.

I further certify that in taking of said deposition and evidence I have complied in all respects with the requirements of the sixty-seventh rule of the Supreme Court of the United States, and I herewith transmit said evidence and deposition, with the exhibits introduced therein, under my seal to Messrs. Church & Church, counsel for the complainant, pursuant to stipulation herein.

In witness whereof I have hereunto set my hand and official seal this 11th day of January, A. D. 1888.

S. G. SPEIR,
Notary Public.

[SEAL.]

Examiner's fees, $40.92.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

105 In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY, and SETH WHEELER, Defendants. } In Equity. No. 5645.

In the Circuit Court of the United States for the District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON. } In Equity.

WASHINGTON, D. C., *January* 16, 1888.

A. J. Todd, Esq., 261 Broadway, New York city.

SIR: We hereby give you notice that on Friday, the 20th day of January, at the office of Chapin & Co., No. 352 Main street, Springfield, Massachusetts, before George Leonard, notary public, commencing at half past one clock p. m., we shall proceed to take the deposition of witnesses to be used as evidence in behalf of the complainants in the above-entitled causes.

The taking of depositions will be continued from day to day until completed.

You are invited to be present and cross-examine.

CHURCH & CHURCH,
Counsel for Complainants.

Service acknowledged this 17th day of January, 1888.

A. J. TODD,
Counsel for Defendants.

106 In the Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
ALBANY PERFORATED WRAPPING PAPER Company and Seth Wheeler, Defendants. } In Equity. No. 5645.

Circuit Court of the United States, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON. } In Equity.

Evidence for the Complainant.

Taken pursuant to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, according to the notices annexed, before me, William O. Day, notary public and special examiner.

Present: Melville Church, Esq., of counsel for the complainant; A. J. Todd, Esq., of counsel for the defendants.

Deposition of Elisha Morgan.

Direct examination by MELVILLE CHURCH, Esq., of counsel for the complainant:

SPRINGFIELD, MASS., *Jan.* 20, '88.

Question 1. State your name, age, residence, and occupation.

Answer. Elisha Morgan; 54; Springfield, Mass.; occupation, president Morgan Envelope Company, manufacturers of envelopes and stationery.

107 Q. 2. You are the president of the complainant corporation in these two cases, are you not?

A. I am.

Q. 3. When did the Morgan Envelope Co. first commence the manufacture of the oval King toilet fixture and roll?

A. We began in August, 1885, and from that time till February, '86, we made small quantities, as we were not then prepared to produce the paper and fixtures. In Feb., 1886, we were prepared, and did produce it in such quantities as were wanted.

Q. 4. Prior to the manufacture of the oval paper and fixture therefor, what, if any, kind of paper in roll form had your company put upon the market?

A. The round roll, unperforated, with a fixture adapted to its use called the "Eureka" fixture.

Q. 5. Can you produce and put in evidence one of said Eureka fixtures and rolls? If you can, please do so.

A. This is the fixture and form of roll.

(Witness produced fixture and roll and the same is marked "Complainant's Exhibit Q, Eureka fixture.")

Q. 6. What, if any, objection was raised to the use of the round roll of paper in connection with this Eureka fixture?

A. The paper could be unwound in longer lengths than required, and would not ordinarily cut off from the saw-tooth cutter unless both hands were used, and it was objected that the cutting edge of saw-teeth would injure the hands unless care was used in cutting off pieces of the paper.

Q. 7. State whether or not the objection to the use of the round roll of paper such as accompanies the Exhibit Eureka Fixture applied to other toilet paper in roll form on the market at the same time.

A. The objection as to not limiting the quantity of paper to be torn off applied to all round rolls of paper, and the other objection that when the fixtures were used with a saw-tooth knife, or cutting device, that the users were liable to be injured in tearing off the pieces of paper, when used in connection with fixtures like or similar to the Eureka.

108 Q. 8. How did your company come to be interested in the oval King fixtures and rolls?

A. I think one of our salesmen, while visiting Chicago, was introduced to the patentee, Mr. Hicks, by some customer of ours who had seen it and highly recommended it. That led to a visit of Mr. Hicks to Springfield for the purpose of negotiating with us for manufacturing and putting it on the market.

Q. 9. What quality or qualities in the Hicks invention particularly impressed you?

A. First in importance was the limiting the quantity of paper which could be separated from the roll at one time, and the simplicity of construction of the roll and fixture with its locking device whereby the roll could not be taken out of the fixture until it had been entirely used and placing the tearing edge out of reach of the hand when such pieces were separated from the roll.

Q. 10. What was the nature of the first arrangement which you made with Mr. Hicks in regard to exploiting his invention?

A. We were to manufacture all the paper, and both he and ourselves were to sell it. We were to pay him a royalty on our sales of both fixtures and paper.

Q. 11. With what favor was the Hicks invention received by the trade and by the public, when you first began to place the fixtures and paper upon the market?

A. So far as I know the trade and the public regarded it as the best form of toilet paper for public places that had been offered, and that expression has continued to be made to the present time.

Q. 12. Will you please give us an idea of the extent of the busi-

ness that has grown out of the handling of the Hicks invention by your company?

A. Our sales have been satisfactorily large and about six times the quantity we have sold of the round roll; we have sent men who sold this paper with other goods, and have introduced it into a great many hotels and public buildings throughout the country.

109 Q. 13. Will you please mention some of the more important public buildings and places where this oval King fixture and paper have been used and continue to be used?

A. The Post Office, Interior and War Departments, of the United States, at Washington; the Department of Justice, the Smithsonian Institute, the Hadley Thread Company and Lyman mills, at Holyoke, Mass.; Willimantic Linen Co., Willimantic, Ct.; Pomena mills, Norwich, Ct.; Leland hotel, Chicago; Russell house, Detroit; Fulton cotton mill, at Augusta, Ga.; Union Steamship Co., Delevan house and Stanwix hall, Albany, N. Y.; some new public building in Chicago, the name I don't remember, and others that I do not recall.

Q. 14. Have you had any interference in your trade in the oval King paper, and if so, from what quarter?

A. We have been interfered with by the Albany Perforated Wrapping — Company and its agents.

Q. 15. Will you please state the character of the interference on the part of the Albany Perforated Paper Company and its agents, and answer fully.

A. We have been undersold as to price 12 to 20 per cent., and where we have, in many instances, given the fixtures the Albany Company or its agents have, after the first order, sold paper to be used on such fixtures at much less prices than we have sold it, and when we have informed the trade that it was a patented article and that we controlled the patents, and if they used paper infringing on our patents we should hold them responsible in law. This led to the issuing by the Albany Wrapping Paper Company of a circular letter agreeing to hold such users or dealers who bought, used, or sold their paper harmless against any action for infringement. It has been frequently reported to us by the trade that the Albany Perforated Wrapping Paper Co. had agreed to sell the oval King toilet paper the same as ours at a dollar a case less than our price, whatever it might be, down to $6 per case, our lowest price being $9 per case.

110 (Last paragraph objected to, as hearsay, by defendants' counsel.)

Q. 16. Do you recall any instance in which parties have secured gratis from your company a lot of oval King fixtures, and have then procured their paper for use therewith from the Albany company?

A. I cannot at this time answer definitely as to my own knowledge, but such facts have been reported frequently by our salesmen.

Q. 17. Should you think, judging from the reports of your salesmen and traveling men and other evidence of like nature received

by you, that the operations of the Albany company in oval King paper were large or small?

(Objected to, as immaterial and as calling for hearsay testimony.)

A. Our salesmen express the opinion that the Albany Perforated Wrapping Paper Co. sell as much of the oval King paper as we do. They visit the dealers throughout the country, and to a considerable extent the users.

Q. 18. What has been the practice of your company in respect to the disposition of oval King fixtures independently of oval King paper?

A. We do not sell the oval King fixtures independently of the oval-roll paper, and only to such parties as deal in or use our paper, and only do sell them to such parties. We also restrict them as to quantity—that dealers shall purchase a given quantity of paper to a given number of fixtures to be sold in connection with the paper only.

Q. 19. What, if any, instructions have you given your agents and salesmen on this point?

A. Generally to sell not more than one fixture to one case of paper; and to dealers we have required that they shall observe the same rule, excepting in cases where they supply a hotel or public building with fixtures, with the understanding that the paper for such fixtures shall be purchased from them, and that their supplies shall be purchased from our company.

111 Q. 20. Have you ever sold oval King fixtures to the Albany Perforated Wrapping Paper Company or to W. J. Morton, of Boston?

A. We have not.

Q. 21. Same question as to Chicago Perforated Wrapping Paper Co., of Chicago, and J. H. Bishop & Co., of Minneapolis, Minn.?

A. We have not.

Q. 22. Have you ever refused to sell oval King fixtures to parties desiring them in quantities?

A. We have.

Q. 23. In the manufacture and sale of oval King fixtures and oval King paper, wherein does the profit reside to the manufacturer—in the paper, in the fixtures, or in both?

A. Almost entirely in the paper; the profit on fixtures is very small.

Q. 24. When did you purchase outright all interest in the invention and patents of Mr. Hicks relating to the oval King fixtures and the oval rolls?

A. I should say in the spring of 1887.

Q. 25. What induced your company to make this purchase?

A. We believed that a large business could be built up in that form of toilet paper, and that it would supersede to a considerable extent all other forms of toilet paper designed for use in public places, and that we could make it more profitable to purchase the patent outright than to pay a royalty during its life.

Q. 26. If you can, will you please produce any letters which you

may have tending to show the interference on the part of the Albany company and its agents with your trade in the oval-roll paper?

A. I have one from W. J. Morton offering paper at $9 where we had supplied fixtures and paper, the paper at $10.50 per case. This letter addressed to the Farren house, Turner's Falls, Mass., dated July 23d, 1887; another dated April 11, 1887, from Geo. W. Zeigler. In this case we had sold our paper at $10.50 per case.

112 (The letters referred to by the witness are offered in evidence to be marked respectively "Complainant's Exhibit R, Morton Letter," and "Complainant's Exhibit S, Zeigler Letter.")

Q. 27. When you began to put out the oval King fixture and roll, what effect did it have upon your trade in the Eureka fixture and roll?

A. We had quite a large trade in the Eureka roll and fixture at that time, and after we offered the oval King roll and fixture the business in the Eureka fixture and round roll fell off to comparatively a small business, and since that time we have made none of the Eureka fixtures, and have still a quantity on hand which we had two years and a half ago.

Cross-examination waived.

ELISHA MORGAN.

HAMPDEN, *ss:*

SPRINGFIELD, MASS., *January* 20, 1888.

Subscribed and sworn to before me this twentieth day of January, 1888.

WILLIAM O. DAY,
[SEAL.] *Notary Public.*

Ormond D. Forbes.

ORMOND D. FORBES, another witness produced on behalf of the complainants, being duly sworn, deposes and says, in answer to questions proposed to him by MELVILLE CHURCH, Esq., of counsel for complainants, as follows:

Question 1. State your name, age, residence and occupation.

Answer. Ormond D. Forbes; 36; residence, Boston; business, salesman.

Q. 2. In what particular business have you been engaged during the past few years?

A. In paper business.

113 Q. 3. Are you familiar with the toilet paper, fixture and roll, known to the trade as the oval King? If yea, state when and under what circumstances you first heard of it.

A. I first heard of it about three years ago this spring, it being shown me when at the office of the Morgan Envelope Company, and I have sold it more or less since that time.

Q. 4. For whom did you first sell the oval King fixture and roll?

A. For F. D. White, Boston.

Q. 5. He was the agent of the Morgan Envelope Co., was he not; or dealt in their goods?

A. He dealt in their goods, but was not agent.

Q. 6. Did you take any part in the introduction of this oval King invention? And if so, state the nature and extent of your operations.

A. I was one of the first, if not the first, to introduce it in New England; the manner of introduction was by showing it personally to dealers and consumers throughout New England.

Q. 7. Was this oval King invention received with favor or otherwise by the trade and by consumers?

A. It was received with favor, they being very much pleased with the same.

Q. 8. What, if anything, especially commended it?

A. Its economy and neatness.

Q. 9. Subsequently to your introducing the oval King invention as manufactured by the Morgan Envelope Company, as you have testified, did you deal in oval paper like the Morgan Company's oval King paper, but of some other concern's manufacture?

A. I did.

Q. 10. What other paper like the oval King did you handle, and under what circumstances did you operate in it?

A. I handled oval paper which I bought of W. J. Morton, of Boston, billing same from myself, and also on commission for him.

Q. 11. Of whose manufacture was this oval paper obtained by you from Mr. Morton?

114 A. I couldn't answer that.

Q. 12. Who did you understand to be the manufacturer of said paper?

A. I understood it was manufactured by Albany Perforated Paper Company.

Q. 13. Why did you discontinue handling oval King paper, as manufactured by the Morgan Envelope Company, and engage in the handling of the paper obtained from Morton & Co., or W. J. Morton; what was the inducement?

A. I could make more money on it, as I could buy of them cheaper than of the Morgan Envelope Company.

Q. 14. What were the relative prices at which this oval paper was furnished by the two concerns?

A. A difference of 75 cents per case.

Q. 15. You sold on commission, did you not?

A. Partly on commission, and sometimes buying the goods outright.

Q. 16. Did you sell any fixtures with the paper which you procured from W. J. Morton?

A. I did not.

Q. 17. To whom did you sell the paper that you procured from W. J. Morton?

A. To dealers and consumers.

Q. 18. State whether or not you sold any of such paper to parties

to whom you had previously sold oval King fixtures and paper as manufactured by the Morgan Envelope Company.

A. In every case I did.

Q. 19. Did you sell them the paper for a less price than they could obtain it from the Morgan Company?

A. In some cases I did.

Q. 20. State whether or not it was your policy in handling this Albany paper procured from Morton to undersell the Mogan Envelope Company or its agents.

A. It was not my policy, but I did so when obliged to, to procure the order.

Q. 21. State whether or not W. J. Morton gave any in-
115 structions or suggestions to those dealing in this paper for him in regard to underselling the Morgan Company where necessary. I refer to his agents and those selling on commission for him.

A. He never gave me any instructions whatever.

Q. 22. Please mention some of the more important places where you know the oval King fixture and the oval roll to be in use.

A. Narragansett hotel, Providence; Dorrence, Providence; Atlantic, Bridgeport; Scoville, Waterbury; Mansion house, Greenfield; Lincoln house, Worcester; the Winthrop in Meriden; Windsor of Holyoke—in a number of mills.

Cross-examination by A. J. TODD, counsel for defendants:

Cross-question 23. Prior to the time of your commencing to introduce the oval King fixture and roll, did you sell the Eureka fixture and roll?

Answer. I did not.

X Q. 24. Are you now selling the oval King fixture and roll for the complainant, The Morgan Envelope Company; that is, acting as one of their agents?

A. The firm that I am with act as their agents, and I sell the goods.

X Q. 25. You are not now selling any oval-roll paper for Mr. Morton, are you? Or is the firm with whom you are employed selling oval-roll paper obtained from Mr. Morton?

A. I am not; not to my knowledge.

ORMOND D. FORBES.

HAMPDEN, *ss:*

SPRINGFIELD, MASS., *January* 20, 1888.

Subscribed and sworn to before me this twentieth day of January, 1888.

WILLIAM O. DAY,
[SEAL.] *Notary Public.*

116 *Watson E. Gibbons.*

WATSON E. GIBBONS, another witness produced in behalf of the complainants, being duly sworn, deposes and says, in answer to questions proposed to him by MELVILLE CHURCH, Esq., as follows:

Question 1. State your name, age, residence, and occupation.

Answer. Watson E. Gibbons; age, 46; residence, Springfield; traveling for the Morgan Envelope Company as their salesman.

Q. 2. How long have you been employed by the Morgan Envelope Co.?

A. About two years.

Q. 3. State whether or not you have taken part in the introduction of the oval King toilet-paper fixture and roll manufactured by said Morgan Envelope Company.

A. I have.

Q. 4. Over what territory have your operations extended?

A. Over New England, Ohio, New York, and Michigan.

Q. 5. How have this oval King fixture and paper been received by the trade and consumers generally?

A. It is a good selling paper, thought well of.

Q. 6. What about the fixture and paper have especially commended it?

A. The way it cuts off—the economy.

Q. 7. What, if any, interference have you met with from the agents of manufacturers of oval paper other than the Morgan Envelope Co.?

A. After the paper was first introdu-ed I found other parties were selling a paper that didn't work well in the fixtures, and besides it was cheaper.

Q. 8. Who were these parties who were selling this paper?

A. Mr. Morton, of Boston, I believe.

Q. 9. What was the difficulty about the operation of this paper, which you say didn't work well into the fixtures?

117 A. It seemed to be wound very loose.

Q. 10. Well, how was it as to size?

A. It looked larger.

Q. 11. In point of fact, was there more or less paper in the bundle than in the paper furnished by the Morgan Envelope Company?

A. There was less in the piece where I measured it.

Q. 12. How much less was this paper sold for than the Morgan Company charged for their paper?

A. From 50 cents to $1.

Q. 13. State whether or not you encountered any difficulty from this cause in securing renewals of orders from parties whom you had originally supplied with oval King fixtures and paper.

A. I did.

Q. 14. In what way would your customers discuss the subject with you?

A. Other parties had offered it for 50 cents or a dollar less per case.

Q. 15. By what name was this oval paper sold by Morton and Company generally known?

A. It was sold for oval King.

Q. 16. From your experience as a traveling salesman seeking to introduce the oval King paper, which should you say was sold in larger quantities, the oval paper manufactured by the Morgan Envelope Company or the oval paper not of the manufacture of said company, sold by Morton & Co. and others?

A. It seems to me that most was sold by those—by those I mean the competing concerns.

Q. 17. What have been your instructions, if any, in regard to selling quantities of oval King fixtures without paper?

A. Not to sell the fixtures without the paper.

Q. 18. Will you give instances of the use of this oval King paper by prominent hotels or other public places and corporations?

118 A. Chicopee M'f'g Co.; the Windsor hotel, at Holyoke; Delavan house, Albany; the Vanderbilt house, Syracuse; Tifft house, Buffalo, and elsewhere.

Cross-examination:

Cross-question 19. What was the length of the paper in the roll, as manufactured by the Morgan Envelope Company?

Answer. I couldn't tell.

X Q. 20. Will you testify that it never varied in length from time to time?

A. No, sir.

X Q. 21. What was the difference in the length of the two rolls which you say you measured?

A. There was two ounces in weight difference.

X Q. 22. Then you mean to testify on your direct that you found the difference in the rolls by weight and not by measurement in the rolls you compared?

A. One roll I compared, as I say, there was two ounces difference in weight; and in another the Morgan Company's was the longest; I couldn't tell just how much longer.

X Q. 23. Was the Morgan Company's roll a little the longer by inches or by feet; and if so, how much the longer should you say it was?

A. I shouldn't want to testify as to how much longer it was; I have forgotten.

WATSON E. GIBBONS.

HAMPDEN, *ss:*

SPRINGFIELD, MASS., *January* 20, 1888.

Subscribed and sworn to before me this twentieth day of January, 1888.

WILLIAM O. DAY,
Notary Public.

[SEAL.]

119 Adjourned till Saturday, January 21, 1888, at 9.30 o'clock a. m.

WILLIAM O. DAY,
Notary Public.

SPRINGFIELD, MASS., *January* 21, 1888.

Met pursuant to adjournment.
Present, same counsel as before.

Howard B. Handy.

HOWARD B. HANDY, another witness produced in behalf of the complainants, being duly sworn, deposes and says, in answer to questions proposed to him by MELVILLE CHURCH, Esq., as follows:

Question 1. What is your name, age, residence and occupation?
Answer. My name is Howard B. Handy; traveler for Morgan Envelope Co. as salesman; age is 39 years old; residence, Springfield, Mass.

Q. 2. How long have you been employed by the Morgan Envelope Co. as a traveling salesman?

A. This is my twelfth year.

Q. 3. State whether or not you have assisted to introduce the oval King fixture and paper manufactured by the Morgan Envelope Co.

A. I have.

Q. 4. How has the oval King invention been received by the trade and by consumers generally?

A. They like it very much; they speak very highly of it.

Q. 5. State whether or not the oval King invention has supplanted or replaced in a degree any other toilet paper and fixture; and if so, what kind of a fixture and paper has it displaced?

A. It has taken the place of the Albany perforated paper in most cases in hotels, factories, and other places where I have put it in.

120 Q 6. What, if anything, in the oval King invention is there to commend it in preference to the perforated roll paper and fixture of the Albany Perforated Wrapping Paper Co.?

A. Well, in the first place it locks the paper in and prevents tearing off more than one piece at a time, and by locking it in prevents the stealing of the roll and carrying it off, and people who have used the Albany and use ours claim that there is a great saving of paper.

Q. 7. State what, if any, interference you have met with in placing the oval King toilet paper upon the market.

A. The interference has been after once introducing it. After I had sold it once or twice to a man the next time I would go around I would see some paper, oval King, that didn't come from us, and the price in every instance has been lower than our price from a dollar to a dollar and a half a case. I lost a good many orders in that way. In fact I have never been able to get a customer back after once having bought the Albany paper at the reduced price;

but I was often told that if I would meet the Albany price they would be glad to give me the order.

Q. 8. What kind of paper do you mean in your last answer by the term Albany paper?

A. I mean the same style of paper the Albany people put up as we do and call the oval King paper, and the trade, in speaking to me of it, speak of it as the Albany oval King.

Q. 9. From your experience as a traveling salesman, which concern should you say furnished the trade with more oval King paper—the Morgan Envelope Company or the Albany Perforated Wrapping Paper Company?

A. Judging from the large wholesale trade that we formerly had, and have now lost, I should think the Albany, perhaps, was selling the most paper.

Q. 10. Will you mention some of the places, such as mills, hotels, or other public places where the oval King paper is used?

A. Take Detroit first—Russell house, Griswold house,
121 American Paper Co., J. W. Fales, A. S. Bond; take Kalamazoo, Burdick house, American house; Kalamazoo house; Chicago—John Morris Co., Butler Bros., F. P. Ely & Co., Leland hotel, Davis & Morse, Maxwell & Co., A. C. McClurg & Co., Western News Co., E. J. Lehman, J. B. Farwell & Co., Royal Insurance Co., Montgomery, Ward & Co., George E. Marsh & Co.; St. Louis—George D. Barnard & Co., Hotel Hunt, F. O. Sawyer & Co., H. P. Graham, Linden hotel, R. & T. A. Ennis, Garrison, Chapel, Perie Paper Co., and many others, and in Chicago there are many others too; Cincinnati, Ohio—Gibson house, Beidenger & Selbert, Louis Sneider Sons, and many others. In many other places where I go they use the paper.

Q. 11. What instructions, if any, have you received from the Morgan Envelope Company in regard to the sale of oval King fixtures without paper?

A. My instructions have been not to sell the oval King fixtures unless we were sure they were to be used with our paper—the Morgan Envelope Company's paper.

HOWARD B. HANDY.

HAMPDEN, *ss:*

SPRINGFIELD, MASS., *January* 21, 1888.

Subscribed and sworn to before me this twenty-first day of January, 1888.

WILLIAM O. DAY,
[SEAL.] *Notary Public.*

Henry A. Chapin.

HENRY A. CHAPIN, another witness produced in behalf of the complainants, being duly sworn, deposes and says, in answer to questions proposed to him by MELVILLE CHURCH, Esq., counsel for complainants, as follows:

Question 1. What is your name, age, residence and occupation?

Answer. Henry A. Chapin; Springfield, Mass.; age, 61;
122 I am by profession a solicitor of patents, and have practiced as an expert in patent causes for 10 years or more.

Q. 2. What, if any, has been your experience in the consideration of mechanical subjects, the reading of letters patent for inventions, and as an expert in patent causes?

A. For about 20 years prior to commencing practice as a patent solicitor and expert I was engaged in designing and constructing machinery of various classes, both in this country and in Europe, and for the past ten years I have been called upon almost daily to compare letters patent and inventions for the purpose of determining likenesses and difference there between and for giving an opinion concerning the same.

Q. 3. Have you examined and do you understand letters patent granted to Oliver H. Hicks, as follows: No. 325,410, dated September 1st, 1885; No. 325,174, dated August 25, 1885; No. 357,993, dated February 15, 1887?

A. I have examined the letters patent referred to in question, 325,410, 325,174, 357,993, and believe that I understand the same.

Q. 4. Have you examined the package of oval toilet paper made by the defendants and marked "Complainant's Exhibit Defendants' Roll A," and do you understand the construction of said roll?

A. I have examined the said roll marked "Complainant's Exhibit Defendants' Roll A," and think that I understand the construction thereof.

Q. 5. Assuming that said patent No. 325,410, which for convenience I shall hereafter designate as the oval-roll patent, covers by its claim an oval or oblong bundle of toilet paper, consisting of one or more lengths of paper formed into a continuous band, whose internal diameter when the band is made is made to assume a circular or cylindrical form is not less than twice the thickness of the band at any one point, state whether or not you find any such structure in the said defendants' roll, Complainant's Exhibit A as called for by said claim. Give your reasons for any opinion you may express.

123 A. Upon comparing said Exhibit A with said oval-roll patent, I find that said exhibit possesses the same structural peculiarities as are shown and described in said oval-roll patent, and as more particularly pointed out in the single claim thereof. Said exhibit consisting of a band of paper which, without more particularly examining the roll than is indicated by its rolled form, appears to consist of a band of paper, and the internal diameter of the same or the diameter of the opening through the center thereof is greater than the thickness of the paper.

Q. 6. What do you find to be the structural peculiarities of the roll described in the oval-roll patent and illustrated by the defendants' roll Exhibit A?

A. I understand that the said oval-roll patent describes and shows a roll of paper of oblong or oval form or shape, the short, rounded ends of which serve as guides for determining the proper points at which the paper is to be separated in order to produce

sheets of a length desirable for use. Upon a careful consideration of the roll described and shown in said oval-roll patent, and of the description of said roll contained therein, I find that said roll is what may be termed a piece-measuring roll; that is to say, that its peculiar form having the said short rounded ends enables one to more easily sever pieces from said roll at or about on a line with said rounded ends. I also find that it is set forth in said oval-roll patent that one purpose of the construction of the said oval or oblong roll is to provide a roll adapted to produce therefrom sheets of the desired length, from which I understand that the interior and exterior of said rolls are given such circumferential dimensions as tend to produce pieces of paper, each of which is substantially of the length of one circumference, which are both of a practicable or desirable length for use; in other words, that pieces of paper may be severed one after another from said oval roll, each having substantially the length of the circumference of the roll from the outer surface to the finished end of the roll, which
124 shall be of a practical and useful length, and that thus the entire roll may be used up without any loss or waste of paper. Having referred to the peculiar construction of the roll shown in said oval-roll patent, I have to say that I find that defendants' roll A possesses the same structural features to which I have referred.

Q. 7. Do you find in the oval-roll patent any suggestions as to the dimensions and proportions proper to be followed in the construction of a roll embodying the patentee's invention?

A. I do; and they are embodied in the following language which I find in the specification of said patent: "The band I make of a thickness calculated to produce sheets, severed at the point stated, of practical and economical length, from the time the bundle is opened until it is consumed." From the foregoing quotation, looking at it from a mechanical point of view, I find therein sufficient directions to enable a mechanic to make a roll of paper which would embody the peculiarities embodied in the claim of said patent. That is, I mean that were I to make a roll of paper, following the directions which are there quoted, I should prepare a mandrel on which to roll the band, having a circumference which would require a piece of paper to once encircle it, which would be found a practical and useful length, and then I should wind the band up to such a circumference as would produce a piece of paper having the length of said circumference, which would not be of impractical or undesirable length, or one which would occasion unnecessary waste in using the same. That is to say, all of the sheets of paper which would be severed from the roll so made, each having the length of the circumference of the roll, would all be of "practical and economical length."

Q. 8. State whether or not you find in the patent any specific directions as to the proportions to be followed in the construction of the patentee's roll.

A. I do. I find it further stated in the specification as
125 follows: "I make the internal diameter of the band, when in

cylindrical form, of not less than twice the thickness of the band at any one point, and the proportions which I prefer to employ are as follows: Width of paper from 4½ to 5 inches; internal diameter of bands, when in cylindrical form, about 2¾ inches; external diameter, from 4 to 5 inches."

Q. 9. Following the proportions thus given by the patentee in the patent, about what would be the length of the convolution at the outer circumference of the roll, and what the length of the convolution at the inner circumference?

A. The roll having an outer diameter of 4 inches would give a piece of paper about 12 inches in length; that having an outer diameter of 5 inches would give a piece of paper about 15 inches in length; the roll having an internal diameter of 2¾ inches would furnish a piece of paper about 8¾ inches in length. The lengths of sheets above referred to are those which would be found at the extreme internal and external diameters referred to.

Q. 10. Have you examined the oval King roll manufactured by complainant, and of which Complainant's Exhibit Complainant's Roll B is a sample?

A. I have examined the roll referred to in the question.

Q. 11. I have requested you to take a sample of the defendants' oval roll like Exhibit A and a sample of complainant's roll like Exhibit B, and to cut each of said rolls clear through, from its external to its internal circumference, and to secure at one end the resulting sheets, in order that we might determine the length of the first and last convolutions that would be withdrawn from each of said rolls when practically used. Have you done so; and, if yea, will you please produce the rolls so cut and give us the result of the measurements of the sheets?

A. I have caused rolls of paper, such as are referred to in the question, to be cut as there stated and to have the sheets thereof attached by one end, which rolls I now produce as exhibits,
126 the first which I produce being complainant's roll, and request that it be marked "Complainant's Exhibit T, Complainant's Cut Roll;" and the second one which I produce being defendants' roll, which I request be marked "Complainant's Exhibit U, Defendants' Cut Roll." Upon measuring the length of the first convolution of said complainant's cut roll, Exhibit T, I find that the length of said convolution is between 9¼ and 9⅜ of an inch in length, and that the length of the outer convolution of the same roll is 13⅛ inches. Upon measuring the inner convolution of Complainant's Exhibit U, Defendants' Cut Roll, I find that the length thereof is between 8⅝ and 9 inches, and that the length of the outer convolution of the same roll is 13⅜ inches.

Q. 12. State whether or not you consider the complainant's roll as falling within the description of roll referred to in specification of oval-roll patent and covered by the claim thereof.

A. Referring to Complainant's Roll Exhibit B, I find that it does fall within the description of the roll referred to in the said patent, inasmuch as both the inner and the outer convolutions thereof and all of the convolutions between the two are capable of being sepa-

rated from the band forming the roll and to produce sheets of paper of a size desirable for use.

Recess taken at 12.20 until 2 o'clock p. m.

Met pursuant to adjournment at 2 o'clock.

Question 13. State whether or not you consider the defendants' roll Exhibit A as falling within the description of roll referred to in the specification of said oval-roll patent and covered by the claim of said patent.

Answer. I do, and for the reasons given in my last answer.

Q. 14. Please describe what you understand to be the manner of removing the paper from the oval roll described and illustrated in the oval-roll patent when it is desired to make practical use of the paper.

127 A. In using the roll referred to in the question to detach pieces of convenient and useful length therefrom, one after the other, I understand that the roll is held on one hand, the fingers thereof being inserted through or partially through the roll, flat wise, so as to preserve so far as practicable its oval form, and then by grasping the end of the band and drawing it against the rounded end of the roll the piece, whose end is so grasped, is easily torn from the roll at the said rounded end thereof, and the end of the paper of the roll, from which the said piece is torn, easily falls to a pending position, ready to be grasped for the purpose of tearing another piece of paper from the band forming the roll.

Q. 15. Do you or not find that the defendants' roll, Exhibit A, is capable of being thus manipulated?

A. I believe that said defendants' roll, Exhibit A, is capable of being manipulated in the manner I have described, to separate pieces of paper therefrom.

Q. 16. What is the object of the drawing from these oval rolls, each time, a piece of paper from about 9 to 13 inches in length, as you have testified?

A. I understand that the object in providing a roll of paper capable of having pieces of paper, of substantially the length stated in the question separated therefrom, which roll possesses structural characteristics which enable the user to separate a piece of paper therefrom with some certainty as to the length of the separated pieces, is to provide means whereby pieces of length suitable to be folded are torn off, and it seems that the inventor, Hicks, as stated in said oval-roll patent, hit upon the expedient of making a roll of such dimensions, both as to internal and external diameter, capable of producing sheets, when severed at one of the rounded ends of said rolls, having such length as renders them of convenient size for practical use after being so folded, the said piece ordinarily being folded at a point about equidistant between its ends. I do not understand, however, that the inventor, referring now to the

128 oval-roll patent, limits the construction of his roll exactly to such dimensions as constitutes each convolution of the roll, a piece of paper of the lengths, as to the maximum and minimum,

as I have stated in a previous answer; for he says, referring to the dimensions which he gives of a roll, and to which I have hitherto referred, that the proportions there stated are those which he prefers to employ.

Q. 17. I now show you an ordinary roll of perforated paper such as is manufactured by the Albany Perforated Wrapping Paper Co., and I ask you to state whether or not such roll has the structural characteristics of the roll described and claimed in the Hicks oval-roll patent?

A. I do not find that the roll of paper referred to in the question possesses the structural characteristics described and claimed in said oval-roll patent, for the internal diameter of said roll is not greater than the thickness of the paper, and a convolution of that roll wound therefrom nearest its center would not constitute what is stated in said patent as a sheet of a size desirable for use, nor is said roll of an oblong or oval shape, but is cylindrical in form.

Q. 18. Could you with the same degree of certainty tear from a round roll of paper a length of paper suitable for use without risk of wastage as easily as you could withdraw a length from the oval roll; and, if not, why not?

A. Undoubtedly a person could, by using uncommon care, tear from the round roll a piece of paper suitable for use; but in promiscuous or general use, I believe that the severing of pieces of paper from a round roll with no specific point thereon to guide the operator as to a certain length to be torn off at a time, would result in unnecessary waste, since I believe that the operator would be more or less likely to tear a piece from the roll longer or shorter than may be required; and in the use of a cylindrical roll as described, I do not think that the object stated in said oval-roll patent would be met, or that one object thereof therein stated, which is as follows: "The object I have had in view has been to furnish toilet paper in a form which would prevent in a large measure this vast amount of wastage." Which wastage is there described as consisting in the use of rolls of paper in the following language: "Where the roll plan is practiced the rolls are usually hung so as to freely revolve, and the user, by a pull upon the depending end, oftentimes recklessly reels off yards where feet would answer."

129

Q. 19. Assuming that the operator was so skillful that he could by eye measurement unwind from a round roll just such a quantity as the patentee, Hicks, describes as a length suitable for use without wastage, could he from said round roll tear such measured-off piece with the same facility that he could tear a self-measured piece from the oval roll over the short rounded end of the latter?

A. The extended cylindrical form of a round roll of paper of the ordinary dimensions does not provide a sufficiently restricted bearing surface for the tearing line of the band to enable one to tear a piece so accurately from the roll as one can do when tearing a piece across the short rounded ends of an oval or oblong roll. In referring to the cylindrical roll in this answer as having a certain extended surface, I mean such a roll when of full or nearly full size.

Of course, as its diameter becomes reduced, as when the roll is nearly used up, it has a diameter which would present a tearing surface substantially like the short rounded end of the oval roll. But when the cylindrical roll has become reduced in diameter, as just stated, not one but several convolutions are required to constitute a piece of paper of useful dimensions, and said piece can be had only by unwinding several convolutions without any certainty as to exact length.

(The round roll shown the witness is here offered in evidence, and marked "Complainant's Exhibit V, Defendants' Perforated Round Roll.")

Q. 20. I have asked you to take another roll like Exhibit V and cut it from circumference to center, and fasten the resulting sheets together. Have you done so; and if yea, will you please produce it?

A. I have caused a roll substantially like Exhibit V, con-
130 cerning which I have been testifying in the last couple of answers, and have had it cut as stated in the question, and now produce it and request that it be marked "Complainant's Exhibit W, Defendants' Cut Perforated Round Roll."

Q. 21. Will you please measure the longest sheet in this cut roll W, which represents of course the dimension of the outermost convolution of the uncut roll, and also measure the length of the shortest sheet which will represent the dimensions of the innermost convolution of the uncut roll, and state the result to the examiner?

A. I have measured said innermost and outermost convolutions of said cut roll, and find the outermost one thereof to be $11\frac{3}{8}$ inches in length, and the innermost one to be 4 inches in length.

Q. 22. What proportion of the sheets resulting from the cutting of this roll would be rejected, if you applied the rule which the patentee Hicks laid down for the production of sheets of a length desirable and suitable for use?

A. Taking out of said cut cylindrical roll the sheets of paper which are below the length of the interior convolution of an oval roll of paper, as stated in the former answer—that is, $8\frac{3}{4}$ inches in length—there would remain of said cut cylindrical roll about one-third of the sheets of said cut roll, which would answer and as would constitute, in the words of said oval-roll patent, "sheets of a size desirable for use;" that is to say, as I understand it, sheets long enough to be folded, and, after being folded, to present a desirable superficial area.

Q. 23. We are then to infer that if one of these round rolls of paper, such as sold by the defendants, were to be used by detaching from it each time one convolution or one circumference of paper, in accordance with the theory of the Hicks invention, there would be rejected two-thirds of the roll as not competent to produce convolutions or sheets of a length desirable for use; am I right in this?

A. I understand that sheets detached from the roll, or sheets
taken from a roll, in accordance with the Hicks invention,
131 are intended each of them to be of a sufficient length to be

folded, and after having been folded to constitute sheets of a desirable size for use; and therefore it would follow that such sheets of the cylindrical roll as result from the separation of a single convolution of that roll as are not of sufficient length to fold and then present such superficial area as may be desirable for use, would, I think, be rejected, or be made use of as single sheets, so far as their length would permit, at considerable inconvenience as compared with a sheet or convolution long enough to be folded as described and then constitute the sheet large enough to be useful.

Q. 24. In your judgment, does the oval roll manufactured and sold by the defendants similar to Exhibit A exhibit a bundle of paper consisting of one or more lengths formed into a continuous band which when in cylindrical form has an internal diameter greater than the thickness of paper?

A. It does.

Q. 25. Does, in your judgment, the cylindrical roll manufactured by defendants, and similar to Exhibit V, exhibit such a structure?

A. It does not.

Q. 26. Have you examined and do you understand the construction of the oval King fixture manufactured by the complainants and of which Complainant's Exhibit C is a sample?

A. I have examined and believe that I understand the construction of the fixture referred to in the question.

Q. 27. Do you also understand the manner in which said fixture co-operates with an oval roll of paper like complainant's roll Exhibit B or Defendants' Exhibit A?

A. I do.

Q. 28. Referring now to letters patent No. 325,174, which, for convenience, we may call the first fixture patent, do you or not find the fixture shown and described and claimed in said patent to be similar to the oval King fixture of complainants of which Exhibit C is a sample?

132 A. Referring to said first fixture patent, and particularly to the claims pointed out in the fourth and fifth claims of said patent, I find in said Exhibit C, supporting arms, a stop-plate, or cutter, extending between said arms, and an oscillating roll plate having its bearings in said arms, and adapted to hold a roll of paper; and I also find in said exhibit a back plate and supporting arms, a plate forming the stop and cutter, and an oscillating core plate, all as desrribed in said patent, and particularly referred to in claims 4 and 5 thereof.

Q. 29. Please compare the oval King fixture Exhibit C, having the oval roll Exhibit B, or the oval roll Exhibit A, upon its core plate, with the first fixture patent, and state whether or not you find said fixture and roll when thus combined to embody the mechanical elements described in claims 1 to 5 of the said first fixture patent; and also whether you find said mechanical elements to co-operate in the manner set forth in said claims.

A. I have placed both of said oval rolls, Exhibits B and A, on said fixture Exhibit C, and I find said fixture, with either one of said rolls, to embody the mechanical elements referred to in the 1st,

2d and 3d claims of said first fixture patent, inasmuch as when the oscillating core plate of the said fixture is placed within either one of said rolls it becomes, within the language used in the 1st and 2d of said claims, both "a weighted oscillating roll of toilet paper," and an "oscillating roll of toilet paper, having its bearings out of line with its centre of gravity;" said rolls, when placed on said plate and hung in said fixtures, being capable of being "actuated in one direction by a pull on its free end." Said fixture also embodies in its construction a plate designated by "M" in the patent against which said roll is moved when its end is pulled as aforesaid, which plate co-operates with said roll to stop its rotation and to sever the unwound portion when the roll has reached the limit of its motion in one direction. Upon comparing the said exhibit rolls and

133 fixture with said first fixture patent, I find that said fixture and either one of said rolls, when combined in the manner stated, embody the mechanical elements described in claims 1, 2 and 3 of said first fixture patent, and said fixture Exhibit C embodies, as I have heretofore said, the mechanical combinations of the 4th and 5th claims of said patent, either with or without the roll being placed thereupon, and the said mechanical elements of said fixture or fixture and roll combined co-operate in the manner set forth in the said claims 1 to 5 of said patent.

Q. 30. Referring now to letters patent No. 357,993, or, in other words, to the second fixture patent, do you or not find the fixture shown and described and claimed in said patent to be similar to complainant's oval King fixture of which Exhibit C is a sample?

A. I find the fixture shown and described in said second fixture patent substantially the same as that shown by said fixture Exhibit C; or, in other words, embodying substantially the same operative elements as those shown in said fixture.

Q. 31. Please compare the oval King fixture, Exhibit C, having the oval roll, Exhibit B, or the oval roll, Exhibit A, upon its core plate with the second fixture patent, and state whether or not you find said fixture and roll when thus combined to embody the mechanical elements described in claims 1 to 5 of said second fixture patent, and also whether you find said mechanical elements to co-operate in the manner set forth in said claim.

A. I have compared said fixture C having the said rolls Exhibits B and A thereon, and without said rolls, with the claims of said second fixture patent, and I find that it combines the mechanical elements referred to in the several claims of said patent, which elements co-operate in substantially the same manner stated in said patent and referred to in the claims thereof.

Q. 32. Have you examined and do you understand the construction of defendants' Universal fixture Exhibit D and its mode of co-operation with the defendants' oval roll of perforated paper like Exhibit E?

134 A. I have and believe I do.

Q. 33. Will you please compare said fixture and roll with the first three claims of the second fixture patent and state whether or not said fixture and roll exhibit the mechanical elements called

for by said claims and whether or not said mechanical elements operate in the manner when paper is withdrawn from the roll called for by said claims?

A. On comparing said fixture and rolls referred to in the question with the first three claims of the said second fixture patent, I find that they embody (said fixture and roll) "an oscillating roll of toilet paper actuated in one direction by the pull upon its free end," a stop consisting of a portion of the frame of the fixture which arrests "the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed." The part of the frame of the fixture above referred to against which the roll oscillates and which stops its motion is differently constructed from that shown in said patent, but it performs the function of the stop referred to in said patent. The above-referred-to elements of construction I find in the first claim in said patent, and said elements of construction are combined and operate in substantially the same manner as referred to in said patent, and more particularly in the first claim thereof. Upon comparing said fixture and roll and the operation thereof with the things referred to in the second claim of said second fixture patent, I find that said fixture and roll embody the combination of elements above referred to, and in addition thereto the stop "for arresting the motion of said roll at the limit of the oscillation in the opposite direction." It is true that the said stop for limiting the oscillation of the roll in the opposite direction is not a structural part of said fixture itself, but said fixture is so arranged and hung relative to the wall of the room or compartment where it is placed that the roll swings against said wall and its reversed motion is thereby arrested after the piece of paper has been torn from the roll and said wall in conjunction with the fixture which supports said roll performs the equivalent function of the stop referred to in the sec-
135 ond claim of said second fixture patent, which is there said to arrest the motion of said roll at the limit of the oscillation in the opposite direction. Upon comparing said fixture and roll with the things referred to in the third claim of said second fixture patent, I find that it contains the above-rehearsed elements of construction, and in addition thereto "an oscillating roll of toilet paper having its bearings out of line with its center of gravity." To resume, I find that said Universal fixture and roll, together with the wall against which said fixture is suspended and that part of the frame of the fixture against which said roll oscillates when its end is pulled and a piece is severed, combine the equivalent mechanical elements described in said second fixture patent, and more particularly referred to in the 1st, 2d and 3d claims thereof, and that said mechanical elements in said fixture and roll co-operate to produce substantially the same result as is described and claimed in said patent, hereby referring to the first, second and third claims thereof.

By consent of the counsel the further examination of this witness is deferred till Friday, January 27, 1888, at the office of A. J.

Todd, 261 Broadway, New York city. And it is agreed that the officer before whom the foregoing testimony has been taken need not append a formal certificate; further, that the custody of the foregoing testimony and the exhibits introduced during the taking thereof be given to the counsel for complainants.

WILLIAM O. DAY,
[SEAL.] *Notary Public and Special Examiner.*

NEW YORK, *January 26th*, 1888.

Met pursuant to adjournment.
Present: Counsel as before.

The examination of H. A. CHAPIN, Esq., resumed:

Question 34. Please examine the second fixture patent, No. 357,993, and state whether or not you find any statement
136 therein indicating that the stop referred to in the first three claims should of necessity have a cutting action, as well as a stopping function.

A. On referring to the patent mentioned in the question, I find that a "plate M" is there referred to, which plate occupies a position between the "arms E E;" and it is stated in said patent that the outer edge of said plate may be made either plain or serrated. It is further stated in said patent that "the plate M performs the function of a stop for arresting the forward rotation of the roll and holding the roll while the section of paper is being removed, as well as the function of serving said section of paper; and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll." From the above-quoted description of the function of the plate M I do not understand that said plate M or stop should of necessity have a cutting action, but that it is capable of arresting the motion of the roll, when the end thereof is pulled upon, for the purpose of detaching the piece. As I understand the action of tearing off a piece of the roll, when the roll is brought to a stop in its rotary movement by pulling on the end thereof, the severance of the paper at some point at or near the point where the end leaves the body of the roll will take place, owing to the narrow, rounded end of the roll against which the paper is most strongly drawn. I notice in figure 6 of said patent, number 357,993, there is shown a round roll which is provided with a stop A^2, which is designated in said patent as a "distance-determining stop," by which I understand that the roll to which it is applied may be rotated by pulling upon its end until one end of said stop is brought against a portion of one of the arms of the fixture in which the roll is hung, and that by pulling upon the end of said round roll when it is so stopped, the piece of paper will be severed at or near its junction with the body of the roll. I notice in connection with said fig-
137 ure 6, of the patent to which I have referred, a horizontally projecting part reaching from the fixture there shown to-

wards the under side of the roll, which is not described in the patent, said figure 6 being, as stated therein, a view of a modified form of the invention. I notice that what is evidently in the end of the roll is shown in figure 6 as hanging down opposite or against the end of said projecting part. If said part be a strip against which the end of the roll is drawn when pulled upon it would probably be severed at that point, but whether said projecting part be there or not, the end of the roll would be severed, as I have already stated, at or near its junction with the roll when the roll is brought to a stop in its rotary movement.

Q. 35. In the case of an oval King fixture, like Exhibit C, equipped for operation with the oval King roll, like Exhibit B, what would be the effect of the arrest of the roll, just before it came in contact with the serrated cutting edge; notwithstanding the fact that the roll did not come in contact with the cutting edge; would there not be a severance of the piece of paper pulled, and if so, where would such severance take place?

A. I have caused to be mounted a fixture, such as referred to in the question, and which I introduce as "Complainant's Exhibit X," said fixture being provided with an oval roll of paper. For the purpose of illustrating and determining what action would take place concerning the tearing off of a piece of paper from an oval roll hung in said fixture, without permitting the side of said roll to come in contact with the serrated edge of the fixture, I insert within and through said roll a bar or stick whose ends project beyond each end of the roll and are capable of being made to swing against the upper sides of the arm of the fixture when the roll is pulled upon, and stop the oscillating movement thereof before the roll can be brought against said serrated edge; and I find, by operating said roll and fixture to separate a piece of paper without letting the roll so mounted and arranged hit said serrated edge, that it is as easy and con-
138 venient to separate the piece or convolution of the roll as when the roll is permitted to swing against said serrated edge of the fixture. I find, by operating said Exhibit X and tearing off quite a number of pieces in succession, that they all have almost an unvarying length, whereby it is indicated that the means referred to for stopping the oscillating of the roll when its end is pulled upon, namely, the bar passed through the roll, to which I have referred, serves substantially the same purpose in the operation of severing pieces of paper from the roll as does said serrated part of the fixture against which the roll is oscillated when not provided with said bar passing through it. In operating said roll and fixture as I have described, with said bar for a stop, the severance of the pieces of paper from the roll takes place at the short, rounded end of the roll.

Q. 36. Do you or not find that the oval King fixture, in its mode of operation, has any particular relation to the structure of the oval roll of paper invented by Mr. Hicks, and covered by the oval-roll patent?

A. I have already defined what I considered to be the prominent points of novelty in the said oval roll of paper, and I understand

that the said oval King fixture is constructed to co-operate with said roll to enable the user of the paper to sever conveniently one convolution at a time from the roll, and to that end the said fixture is adapted to permit an oscil-ating motion in said roll when the end of the latter is pulled upon, said oscillating motion being a limited one, whereby one of its narrow rounded ends is brought to and stopped at a position which permits a piece of paper to be severed therefrom at or near said end; and that when the end of the paper has been severed from the roll that the latter, by reason of the peculiar manner in which it is hung in the fixture, oscillates in the opposite direction and causes the end of the band composing the roll to drop in a pending position, ready to be again seized for the purpose of tearing off another piece.

139 Q. 37. I have requested you to prepare a model illustrative of the operation of the Universal fixture like Exhibit D in connection with an oval perforated roll like Exhibit E. If you have done so, will you please produce it that it may be offered in evidence to be marked "Complainant's Exhibit Y"?

A. I have caused an exhibit to be prepared such as is referred to in the question, and request that it be marked "Complainant's Exhibit Y."

(Said exhibit is offered in evidence as "Complainant's Exhibit Y.")

Q. 38. Will you compare the Universal fixture with the fifth claim of the second fixture patent, and state whether or not said fixture embodies the mechanical elements called for by said claim, and whether or not said mechanical elements operate in the manner called for by said claim when paper is drawn from a roll mounted on the core plate of said fixture?

A. In answering the foregoing question, I refer to Complainant's Exhibit Y, whereon is mounted the said Universal fixture. Said fixture containing as its structural elements a plate to be fastened against a wall or supporting place, arms for supporting a core plate, a core plate of metal pivoted at one edge thereof, whereby it becomes weighted more or less on one side of its pivot. On said fixture on Exhibit Y is placed an oval roll of paper, and upon the said core plate of the fixture, the free end of said core plate and the larger part of said roll hanging normally below the pivots on which said plate and roll are suspended in the arms of the fixture. I have heretofore referred to the construction and operation of said roll and fixture, and have given my reasons why the wall against which said roll is hung constitutes "a stop for limiting the motion of said plate." Upon comparing the fixture and roll shown in said Exhibit Y with the mechanical elements referred to in the said fifth claim of patent No. 357,993, I find that said exhibit contains the mechanical elements referred to in said fifth claim and that said elements are combined and operate in substantially the same manner as therein referred to.

140 (Counsel for complainant here desires it noted that he shall press for a decree on the claim of the oval-roll patent No.

325,410, and upon all of the claims of the first fixture patent No. 325,174, and on all of the claims of the second fixture patent No. 357,993.)

Cross-examination by Mr. A. J. Todd, counsel for defendants:

Cross-question 39. The patent referring to a bundle of paper, No. 325,410. Do you understand its claim in the giving of your testimony to be limited to a bundle of paper which has an oval form or shape?

(Objected to, as it calls upon the witness to construe the claim, which it is the province of the court only to do.)

Answer. In reading the claim of the patent referred to in the question in connection with the two only figures in the drawings of said patent, and with the specification wherein said roll is described, I arrive at the conclusion that the bundle of paper referred to in the claim of said patent is one having an "oblong or oval shape" ("as contradistinguished from a roll"). I further understand that the bundle of paper referred to in said claim is made of a thickness calculated to produce sheets, severed at the points stated in the specification, of practical and economical lengths from the time the bundle is opened until it is consumed.

(Answer objected to, as not responsive, and question repeated.)

X Q. 40. Question repeated.

(Objection repeated.)

A. For the reasons which I gave in my last answer I understand that the bundle of paper referred to in the claim of said patent is one having an oval form or shape, but possessing the specified elements or substantially those of dimensions referred to in the specification of said patent.

X Q. 41. In the claim of said patent No. 325,410 a diameter is referred to with reference to the thickness of the paper; what
141 kind of diameter is here referred to; and if the internal one of the oval roll, is it the longest or shortest diameter of opening, as two diameters are represented in figure 2 of the patent?

A. In the claim of said patent 325,410 the term "internal diameter" is used, and by reference to the specification of the patent I understand that said diameter is one which is given to the roll when first made in cylindrical form, as expressed by the following language: "I make the internal diameter of the band, when in cylindrical form, of not less than the thickness of the band at any one point."

X Q. 42. Then when "thickness of paper" is referred to in the claim, you understand it to be not one thickness of the band, but two thicknesses?

A. I think it is clearly stated in the specification, from which I have quoted, that the thicknesses referred to are twice those of the thickness of the band at any one point, that is to say, when the roll

is originally wound to a cylindrical shape in process of its production, if one were to measure across the end of the cylinder so formed, it would be found that the internal diameter of the roll or band would be not less than twice the thickness of the band on the opposite side of the cylindrical opening through its end.

Recess.

(Counsel for defendants asks counsel for complainant to state under what circumstances or conditions he alleges that the first fixture patent, No. 325,174, is infringed.

(Counsel for complainant replies that he shall contend that the defendants, by selling fixtures like the oval King fixture, Exhibit C, as shown also in Exhibit X, separately or in connection with oval-roll paper like Exhibit A, or by selling paper like Exhibit A for use upon fixtures like Exhibit C, they infringe the said first fixture patent as to all of its claims.

(Counsel for defendants says the fact is the fixtures like Exhibit C and Exhibit X, sold by defendants, were fixtures originally made and sold by complainant and purchased by defendants from complainant's agents or parties to whom the complainant lawfully sold them; and that to avoid the necessity of calling witnesses to prove this fact, defendants' counsel asks complainant's counsel to admit it on the record, in order to narrow the issues in this case.

142

(Counsel for complainant rejoins that if the statements made by defendants' counsel are true they will have to be proved in regular course, and he does not feel authorized at this time to make any admission of their truth.

(Counsel for defendants asks counsel for complainant to state under what circumstances or conditions he alleges that the second fixture patent, No. 357,993, is infringed.

(Counsel for complainant replies that the same acts above recited as constituting infringement by the defendants of the first fixture patent apply as well to the second fixture patent, and that in addition to those acts he shall contend that the defendants, by the manufacture, use or sale of the Universal fixture like Exhibit D separately or in connection with perforated oval rolls like Exhibit E, also infringe the second fixture patent, as to its first, second, third and fifth claims.

(Counsel for defendants asks counsel for complainant to state under what circumstances or conditions he alleges that the patent No. 325,410 is infringed.

(Counsel for complainant replies the infringement of the oval-roll patent is predicated upon the manufacture, use or sale of defendants' oval rolls like Exhibit A.)

X Q. 43. You refer in your answer to the sixth question to defendants' roll A, possessing "the same structural features" as the patented roll, as shown in patent No. 325,410; to what "structural features" do you refer?

A. The structural features to which I referred in my answer to

interrogatory six, in the roll or bundle of paper, consisted of a roll, or bundle of oblong or oval shape, whereby said bundle is given or provided with short, rounded ends, and one in which the
143 band is made of a thickness calculated to produce sheets severed at one of said short, rounded ends of practical and economical lengths, from the time the bundle is opened until it is consumed; one of the severed rounded ends of the bundle serving as a guide for determining the point at which the paper is to be separated in order to produce said sheets, and affording also the most advantageous surface upon which to tear paper.

X Q. 44. Then are these the structural features which a roll of paper must have in order to bring it within the definition of the claim of patent No. 325,410?

A. The structural features which a roll or bundle of paper should possess to conform to what is referred to in said patent 325,410 and in its single claim, are such as give to a roll of paper the functions which are described in said patent as pertaining to the roll or bundle of paper therein referred to. One function or peculiarity pertaining of the roll of said patent is that it is a roll or bundle of oblong or oval shape, whereby it is provided with short, rounded ends, one of which ends serves as a guide where the paper is to be severed, to separate the convolutions thereof. Another peculiarity of said patented roll, made as described in said patent, is, that thereby said roll is invested with a measuring function which enables the user thereof, either with or without a fixture to suspend it in, to more easily determine the lengths of the pieces to be severed therefrom by tearing each piece from the roll at one of its short, rounded ends, and said measuring function, are provided for by winding the first convolution of the roll of such length as fits said first convolution for a practical use, and the added convolutions of the roll are continued up to such a diameter as will provide outer convolutions thereof, which are all of such length as will fit them for a practical use without unnecessary waste by reason of excessive lengths.

X Q. 45. Then what you say in your sixth answer as to such structure of roll constituting a "piece-measuring roll" you mean that it must have short, rounded ends, do you?

A. I mean that such a roll as I understand is described
144 and shown in patent 325,410, is not, as I understand it, one having a cylindrical form, but it is a roll of oval or oblong form whereby thereon are formed two ends, each of which presents a surface of short, rounded form, which are the result of flattening a cylindrical roll to produce one of said oblong form.

X Q. 46. Then such a roll of paper would infringe the claim of patent 325,410 when in the oval form or shape, so as to have this structural feature of rounded ends, and would not infringe such claim when placed in a rounded form of shape for use. Is not this so, according to your understanding of the claim?

A. I cannot take the place of the court and pronounce upon a question of infringement in the hypothetical construction stated in the question; but a roll of paper possessing the functional possibilities which I have rehearsed in my previous answers would evi-

dently come within the construction described and claimed in said patent 325,410.

X Q. 47. Would or would not you consider such a roll of paper as is referred to in said patent to be within the claim thereof if such roll or bundle was placed in the round form in use, that is, so as not to present said structural features of short, rounded ends, and thus not to become a piece-measuring roll, as you term it?

A. Am I to understand by the last question that the roll mentioned therein is not considered in connection with any fixture, but simply as a roll by itself, to be manipulated as shown in figure 1 of patent 325,410?

X Q. 48. You may consider and answer it in both connections or aspects stated by you.

A. The roll described and claimed in patent 325,410, and particularly as shown in figure 1, must be placed upon something in order to operate it for separating pieces of paper therefrom. In figure 1 in said patent said roll is illustrated as placed upon the fingers of one hand, whereby its form is slightly changed from the roll shown in figure 2 of said patent, and whereby its rounded ends are
145 less acute or narrow than those shown in figure 2; but still said roll, manipulated as shown in figure 1, still presents tearing or severing points which assist in determining the length of the separated piece of paper and facilitate said tearing. I am unable to state whether the court would consider that a roll which possesses the functions pertaining to the roll described in patent 325,410, but varying slightly in form from a strictly oval, as coming within said patent; that is to say, whether a bundle of paper having such an internal diameter as is defined in said patent, and such thicknesses of sides, whereby the length of the convolutions is determined, but varying from an oval more or less, but not sufficient to interfere with the facility of separation of one convolution after another at a certain point on the roll. If the roll mentioned in the question should be devoid of the possibility of the functions pertaining to the roll described in the patent it would evidently not come within the claim thereof.

X Q. 49. I am referring by my last question not to a form of roll "varying slightly in form from a strictly oval," but to such a package of paper as is described in patent 325,410, but without the structural features or rounded ends, which I understand you to state is an essential of the complainant's oval roll. Please answer the last question, with this explanation.

A. If I understand the question as now presented correctly, it pertains to a cylindrical roll of paper having the internal diameter referred to in the claim of patent 325,410; that is to say, one which "is greater than the thickness of paper." In other words, if I am correct, the question contemplates the entire manufacture of a bundle of paper coming within the description of said patent, but lacking nothing but the simple act of compressing the roll to give it an oval form. It would seem to me that a roll so constructed, and capable of being used in the manner set forth in said patent, would come within the latter. Should the roll referred to in the question be

normally, and during its use nothing but, a cylindrical roll, nor be capable of any other form or use than a cylindrical
146 roll, nor capable of the functions of the roll described and claimed in patent 325,410, it evidently would not come within that patent.

X Q. 50. What do you mean by the use of the expression "capable" in the last paragraph of your answer? I presented to you in my last two questions a roll of paper which was capable of being either flattened so as to have shortened rounded ends, as you term it, or capable of being used in a cylindrical form by the placing of a proper form or center within its body or opening. Do you give the latter part of your last answer with this understanding of my question?

A. My meaning of the word "capable" used by me in the last paragraph of my last answer, pertains to the possibilities of use or uses to which the cylindrical roll there mentioned may be put, or to put it more concisely, to the capabilities of use pertaining to said cylindrical roll. I see that I correctly understood your previous question which you further set out in the last question, wherein, if I correctly understand you, you ask if a roll of paper which is capable of being flattened so as to have shortened rounded ends would come under that patent No. 325,410. In answer to that question, as I understand it, I understand that the roll that is capable of being so flattened must have more or less of a hollow center, like the roll described in the last-mentioned patent; and if said roll shall have such a hollow center, and possess such internal dimensions as stated in patent, and be capable of being flattened to produce the roll therein described and claimed, it would seem to me that such a roll would come under that patent.

X Q. 51. You stated in answer to X Q. 39 that the bundle of paper referred to in the claim of said patent No. 325,410 is one having an oblong or oval shape as contradistinguished from a roll. You replied in answer to X Q. 40 that you "understand that the bundle of paper referred to in the claim of said patent is one having an oval form of shape, but possessing the specific elements, or substantially those, of dimension referred to in the specification of
147 said patent." Do you mean to testify that a bundle of paper of any other form or shape, such as a cylindrical, as stated in my two previous questions, would be included within said claim? If so, were not your answers to X Q. 39 and X Q. 40 questions incorrect in limiting the claim to a bundle of paper of oblong or oval shape?

A. I mean just what I stated in my answers to questions 39 and 40, but I say again that a bundle of paper manufactured so as to possess, as I have described, the capabilities of being compressed into an oval bundle possessing the peculiarities which I have rehearsed, and which are described in patent 325,410, whether said bundle be flattened by the maker thereof, or so made that it can be flattened by the user to make an oval bundle, is a bundle of paper which, in my opinion, would come under said patent No. 325,410. In explanation of the opinion I have already given, I have to say

that a cylindrical roll of paper sent out by a manufacturer which cannot be flattened to make an oval roll thereof, and not possessing the capabilities described and set forth in said patent, would not come under said patent in my opinion.

X Q. 52. Would a roll or bundle of paper made as shown at letter B on figure 6 of patent 325,174, and as represented on figure 6 of 357,993, and used with a cylindrical former be a roll of paper which would come within the claim of the patent No. 325,410?

A. Neither of the patents referred to in the question give any dimensions of the rolls of paper shown in figures 6, respectively, thereof; and I am unable to determine from said patents whether the rolls indicated in said figures possess or not substantially the internal dimensions referred to in patent 325,410 as pertaining to the roll therein described. So far, however, as the drawings indicate in said two patents, 325,174 and 357,993, the core or center on which said rolls are wound is large enough to permit the roll, if taken off from said center, to be flattened, thereby making an
148 oval roll. If the manufacturer of rolls of paper such as are shown in the two patents mentioned in the question should insert a core within those rolls, which is incapable of being removed from them, so that the rolls thereby would have to be used in a cylindrical form from the beginning to the end, said rolls, in my opinion, would not come under patent 325,410.

X Q. 53. Please look at the roll of paper now shown you, Exhibit E, and wooden roll of center, Exhibit F, placed in its center, which I understand is the same roll as is shown by the oval roll placed on the Exhibit Y. State whether you consider a roll on Exhibit Y to be within the claim of patent 325,410; also whether you consider the roll E and wooden roll F when put together to be within said patent?

A. If the wooden center roll F, which is within Complainant's Exhibit Paper Roll E, be secured therein so that the paper cannot be separated from it for use, but must be unwound from said center from beginning to end, then said roll E and its wooden center would not, in my opinion, come within the claim of patent No. 325,410. Assuming that the roll now on Complainant's Exhibit Y is the same as Complainant's Exhibit Roll E, and that its internal dimensions and thickness of paper are identically the same as that of said roll E, it does not appear that the dimensions of diameter and thickness of paper are precisely those called for in the claim of patent No. 325,410, but in so far as the said roll upon said Exhibit Y is capable of performing the functions of the roll described and claimed in patent 325,410 it would come under said patent, for the patentee sets forth in such last-mentioned patent what he prefers in the construction of said roll, as to the proportions which he employs in the construction of the roll there referred to, which proportions he gives as follows: "Width of paper from $4\frac{1}{2}$ to 5 inches; internal diameter of band when in cylindrical form, about $2\frac{3}{4}$ inches; external diameter, from 4 to 5 inches." I
149 find that the roll upon Exhibit Y has a width of five inches. The roll Exhibit E, as I understand, has a center with the

same diameter as the roll on Exhibit Y, has an internal diameter of between 1½ and 1¾ inches, and the thickness of paper on each side of the hollow center of about 1 inch.

X Q. 54. Will you say whether or not the roll on Exhibit Y is within the claim of patent 325,410; and, if so, whether it is due to the fact that it is simply an oval roll, or whether it is due to the fact that its internal diameter when in cylindrical form, is not less than twice the thickness of the band at any one point?

A. I said in my last answer that the oval roll on Exhibit Y came within the patent 325,410 in so far as it is capable of performing the functions of the roll described and claimed in said patent. I find upon measuring one of the convolutions of said roll near its surface that said convolutions provide a piece of paper of suitable length for practical use, and evidently a large part of said roll may be used with that practical result, but the interior convolutions of the roll would be too short to be doubled and made practical use of, which might result in more or less waste. I have only to repeat what I said before, that the roll on Exhibit Y, in so far as it possesses the functional capabilities of the roll described and claimed in patent 325,410, would come under said patent.

X Q. 55. You mean it will come under claim of patent 325,410, because it was oval in form or having rounded ends, and not because of the ratio of its dimensions, you having admitted that its internal diameter is not greater than the thickness of the paper band, you having given the dimensions of a similar roll E as being one 1½ to 1¾ inches, internal opening, to 1 inch plus 1 inch of band, or 2 inches in all of band.

A. I did not say that the roll on Exhibit Y would come under claim of patent 325,410 because it was oval in form or had
150 rounded ends; but I did say that in so far as said roll on Exhibit Y possesses the functions and capabilities of the roll described and claimed in patent 325,410 it comes under that patent. I am unable to say whether the court will find that, because the roll on Exhibit Y does not possess the length of convolutions near its center which it would have if it had a larger internal diameter, but that the length of its external convolutions provides pieces of a size practical for use, does not come within said patent; but I have endeavored, for the information of the court, to set forth the dimensions and capabilities of said roll on Exhibit Y, as compared with the roll described and shown in patent 325,410.

X Q. 56. Now, is it not the fact that the claim of patent 325,410 has no reference to an oval roll as such, but only in your interpretation of it, to an oval roll whose internal diameter measures in cylindrical form of the roll not less than twice the thickness of the band at any one point; and is it not with this, your view of the claim, that you do, in your last answer, exclude the roll on Exhibit Y from that claim, although you admit the roll meets with some of the characteristics of the invention mentioned in the patent?

A. It is true that the claim of patent 325,410 does not refer in words to an oval roll, but since that patent neither shows in its drawings nor describes in its specification any complete roll except-

ing an oval one, I understand said claim to refer to a bundle of paper of oval form. The fact, as appears by the roll on Exhibit Y, that said roll is made so that its internal diameter does not conform exactly to the description of said patent, but leaves within the roll the portion thereof near its center which is not capable of being used in the manner for useful purposes described as pertain*in*ing to the roll in patent 325,410, does not, in my opinion, exclude the roll on said Exhibit Y entirely from the claim of said patent, because the majority of said roll from the exterior inwards is capable of being used in the manner and for the purposes set forth in said patent.

151 NEW YORK, *January* 28, 1888.

Met pursuant to adjournment.

Present, counsel as before.

The cross-examination of Mr. H. A. CHAPIN resumed:

Cross-question 57. Having reference to your answer to the last question, from what point should the internal convolutions of paper commence on the roll like that on Y in order to free your mind of any doubt of such rolls being within the claim of patent No. 325,410?

Answer. To constitute a roll possessing the capabilities of use described in the patent referred to in the question, I understand that the minimum lengths of its convolutions should be such as will provide a sheet or piece of paper of a size desirable for use.

X Q. 58. What, in your opinion, is the minimum size of sheet referred to in your last answer?

A. I read in patent No. 325,410 that the band of paper composing the bundle therein referred to is made "of a thickness calculated to produce sheets, severed at the points stated, of practical and economical lengths from the time the bundle is opened until it is consumed." In measuring the roll Complainant's Exhibit Roll T, which is substantially of the dimensions referred to in said patent, I find that the length of the internal convolution of said roll (the latter being cut) is nine inches, which convolution makes what I understand to be a sheet of suitable length for use.

X Q. 59. Then the internal convolutions of the roll on Exhibit Y nearest the opening or center of the roll are not, in your judgment within the patent No. 325,410, and consequently that the roll has not got the proportions mentioned in said patent, and is not within the claim thereof?

A. I think that I substantially answered this last question in my answer to X Q. 55. I think I have stated somewhere in the evidence that I have given in this case, substantially that I do not consider that the sheets of the roll or pieces of the latter,

152 which are the result of separated convolutions of the roll, which have a length much less than the one to which I have above referred, namely, about nine inches, constitute sheets having that degree of usefulness which is described as pertaining to the roll referred to in patent 325,410. Where the court may decide

that the line shall be drawn which will define the degree of usefulness mentioned by the inventor I am unable to say. I said at some place in my evidence, I think, that the convolutions of a sheet of paper near its center, which were found too short for a useful purpose separately, might be used by the multiplication of single sheets; but so used I do not think that they would possess that degree of usefulness, more particularly as pertains to convenience and economy, contemplated by the inventor Hicks.

X Q. 60. Do you not think that the line should be drawn to bring such a bundle within the claim of the patent at an internal diameter of a band which is not less than twice the thickness of a band at any one point, taking such diameter when the bundle is in the cylindrical form?

A. The patentee states in the specification of patent 325,410 that he makes the internal diameter of the band, when in cylindrical form, of not less than twice the thickness of the band at any one point, and the claim refers to a bundle of paper whose internal diameter is greater than the thickness of paper, substantially as described. I said in my answer to X Q. 54 that the interior convolutions of the roll on Exhibit Y would be too short to be doubled and made practical use of, which might result in more or less waste. I can only repeat substantially what I have said before in answer to previous questions where the line should be drawn by saying substantially that I believe it to be the province of the court to decide how much the dimensions of the roll, as stated in patent 325,410 may be varied from in the construction of a roll, and still keep such a roll within said patent.

X Q. 61. How much of the paper would you exclude from the interior convolutions of rolls Exhibit E, and roll on Ex-
153 hibit Y to bring such rolls within the claim of patent No. 325,410?

A. In measuring a roll which is cut transversely from end to end, which I understand to be the same as the rolls mentioned in the question, I find that about one-half, or a little less, of the convolutions of said cut roll nearest the center thereof are shorter than the length of the internal convolution of a roll whose internal diameter when in cylindrical form is about two and three-quarter inches, and, as I have already said, those shorter convolutions do not, as I understand it, constitute sheets of paper of a size desirable for use mentioned by the patentee of patent 325,410; but I must say again that I am unable to say whether the variation mentioned from the roll construction referred to in said patent whereby a number of short convolutions are produced near the center of the roll, as I have described, would, in the opinion of the court, take said roll outside of the patent, since all of the convolutions of the roll up to a certain point thereon are capable each of furnishing a piece of paper of size suitable for use.

X Q. 62. What is the smallest size of sheet of interior convolution and largest size of sheet of exterior convolution which could be used in a roll of paper, and not take it outside of the claim of patent No. 325,410?

A. The specification of said patent does not appear to afford the precise information called for in the question. It is there stated that the inventor makes "the internal diameter of the band when in cylindrical form of not less than twice the thickness of the band at any one point," and that the proportions which he prefers to employ are "width of paper from 4½ to 5 inches; internal diameter of band when in cylindrical form, about 2¾ inches; external diameter, from 4 to 5 inches." I understand from reading said patent that somewhere within about the dimensions given above a roll is formed possessing convolutions, each of which, when separated from the roll, constitutes a sheet of paper of practical and economical
154 lengths for use; and I understand that the roll or bundle of paper referred to in patent 325,410 is one of oval form, and so constructed that the convolutions thereof are of practical and economical lengths for use. Upon measuring the external and internal convolutions of Complainant's Exhibit T, complainant's cut roll, I find that the length of said external convolution is about 12¾ inches, and that the length of the internal convolution thereof is about 9 inches; but I am unable to say what variation from said lengths of convolutions found on said Exhibit T could be made and not take a roll having said variations outside of the claim of patent No. 325,410.

X Q. 63. Would the roll or bundle of paper, say of 5 inches width of band, the smallest convolution of sheet being about 5½ inches and the longest convolution of sheet about 15½ inches, give sheets or convolutions of practical and economical length for use, and would or would not such a roll be within the claim of patent No. 325,410?

A. The claim of patent 325,410 does not specify all the dimensions of sheets which are referred to in the question, nor does the patent itself specify the exact dimensions of the sheets, which are the product of the roll described therein, when said roll is separated into convolutions, and, as I have already said in several of my previous answers, it appears to me that the court must decide what roll construction does come under the patent 325,410 by the capabilities of use which the roll possesses when compared with the specification of said patent. The roll or bundle of paper capable of furnishing by its outer convolution a sheet of paper of 5 inches in width and 15½ inches in length would deliver evidently several external convolutions having an excessive length beyond what may be required for practical use, and whatever length in excess of the practical requirements that said convolutions may possess would result in more or less waste of paper. As I have before stated, the external convolutions of Complainant's Exhibit Roll T is about 12¾ inches, and the internal convolutions of the same roll is
155 about 9 inches, both of which convolutions appear to provide sheets of practical and economical length for use. As to a sheet such as is referred to in the question having a length of 5½ inches, such a sheet by itself would not seem to me to constitute one of desirable length for use, for, although the patent is silent upon that subject, a sheet of such length of 5½ inches would not be sufficiently large to allow of folding for use, but the shortest sheet

or convolution of said Exhibit T is of sufficient length to permit of folding for use.

X Q. 64. If the shortest sheet of Exhibit T is of sufficient length for use, being 9 inches, do not those sheets on same bundle measuring 13 inches, and all the intermediate sheets between 9 and 13 inches, present an unnecessary length of paper and a waste to such extent; that is, if 9 inches is sufficient, while add four more inches to the paper, and if four more inches are added to the paper, why cannot two additional inches be added to its length of sheet, as assumed in my previous question?

A. The construction, under discussion in this case, is a roll of paper which necessarily embodies convolutions of increasing length from its center to its circumference. The hypothesis embodied in the question tends simply in the direction of a bundle of flat sheets of paper, and such a bundle possesses inconveniences mentioned in the specification of the patent 325,410 which are sought by the patentee to be obviated by the use of a roll having certain dimensions of convolutions, all of which are of sufficient length to be useful, but not presenting any capabilities of the wasteful use of paper which can be well avoided in a roll construction.

X Q. 65. Please answer the latter part of my last question.

A. For practical use it is desirable evidently that a roll of paper should be of some considerable length in order to provide such a quantity for use as will not incur the necessity of too frequent renewal; and if the longest convolution of the roll is longer
156 than is required for practical use it necessitates unnecessary waste. It was evidently the purpose of Hicks, the patentee of patent 325,410, to make a roll of paper beginning with a convolution which would supply a piece of paper long enough for practical use, and from said first convolution to wind a roll up to such dimensions as would still furnish a convolution or piece of desirable length for use, but not containing any paper to be wasted in excess of the first convolution of the roll more than was unavoidable in making a roll of paper.

X Q. 66. Why stop at 13 inches any more than 11 or 12 or 14 or 15 inches in length of convolution? Why should an inch or two one way or the other make any difference except to give more or less quantity of paper in the roll to the consumer?

A. It is evident that under the description in patent 325,410 a roll of paper may be made, having the length of convolutions mentioned in the question, and still be the roll described therein, for Hicks says that the dimensions which he gives are those which he prefers, thereby intimating clearly that those dimensions may be varied.

X Q. 67. Please answer the last question from your own judgment and common-sense standpoint, without any reference to the Hicks patent.

A. I think that the only proper basis for an answer to the question must be found in the patent, and I do not understand that that defines concisely either the minimum or maximum length of the convolutions of the roll therein mentioned.

Adjourned for lunch.

Cross-question 68. Then a roll or bundle of paper containing 14, 15 or 15½ or so of inches of outside-sheet convolutions, and less than 9 inches of inner-sheet convolutions would not be within claim of patent 325,410, would it?

Answer. The claim of patent 324,410, as I have already
157 said, does not specify the length of the convolutions of the roll which it refers to, but a roll containing lengths of convolutions such as are referred to in the question, together with the convolutions of the roll intermediate between the inner and outer convolutions, would, in so far as it possesses the capabilities pertaining to the roll described in said patent, come under the latter; but whether the apparent excess of length and shortness of the convolutions referred to in the question would carry the roll possessing the same outside of the patent or the claim thereof in the opinion of the court, I am unable to say. The excessive length of the longest convolutions mentioned in the question would evidently possess elements of waste not contemplated by the patentee of said patent.

X Q. 69. Then you will not testify that such a roll as I have described in the last question would come within the statement of what the Hicks roll is, as set forth in the claim of patent 325,410?

A. I am unable to find in the patent referred to in question any indication or description of the lengths of convolutions which a roll must possess to be like or substantially like the roll therein described and claimed, other than a general one which describes about the dimensions which the roll mentioned in the patent should possess in order that it shall be a roll capable of producing sheets of practical and economical lengths from the time the bundle is opened until it is consumed.

X Q. 70. Question repeated.

A. I don't think I can give a clearer answer to that question than I have just given, because the patent 325,410 does not mention in inches or otherwise the exact length of the convolutions of the roll which he describes in said patent.

X Q. 71. Can you not give a categorical answer to the question, or else say that you are unable to answer it in the terms of the question?

A. The best answer that I can give to that question is to repeat my answer to X Q. 68.

158 X Q. 72. If length of sheets of 9, 10, or 11 inches is sufficient, would not a sheet of a length of 12¾ inches present a waste of from 1¾ to 3¾ inches, as compared with the length of such other sheets of 9 to 11 inches? I ask you to answer this without reference to the Hicks patent, 325,410, in question.

A. Answering that question without reference to the patent 325,410, as requested in the question, the matter of waste referred to therein would be one to be determined by the user. One user might be of less economical habits than the other, and consider the longer sheets as no waste, whilst the user of economical habits would use shorter sheets from motives of economy.

X Q. 73. Now, would not an increase in the length of those sheets

to 14 or even 15 inches, as compared with the short sheets 9 to 11 inches, cause simply an increase in waste over the shorter sheets, but about which waste there would be differences of opinion with the users, such as you have stated in your last answer?

A. If a sheet of 13 inches in length is as long as may be thought requisite for practical use, it is self-evident that a length in excess of 13 inches would be waste.

X Q. 74. Is not, in your opinion, a length of $12\frac{3}{4}$ inches wasteful, if 9 inches answers the purpose as well?

A. I do not see that the question of length of sheets, while we are discussing sheets produced from a roll by separating the convolutions of the latter, one from the other, can be considered without including therein the necessary increase in length of convolutions which a roll of paper must possess. I understand that the patent 325,410 describes a roll consisting of a number of convolutions, each of which is of a length suitable for practical use. If it is thought best by the maker of a roll or bundle of paper under said patent to make said roll so that the outer convolution thereof shall be but $12\frac{3}{4}$ inches long, I see nothing in the patent descriptive of said roll or of what said roll ought to be to conform to said patent,
159 which would constitute said roll as one not conforming to the description therein, with the understanding, however, that the inner convolution of said roll is of a practical and economical length.

(Answer objected to, as not responsive, and question repeated.)

X Q. 75. Question repeated.

A. I see no way of making a roll of paper every convolution of which shall be 9 inches long.

(Same objection, and question again repeated.)

X Q. 76. Question repeated.

A. If it were possible to make a roll of paper consisting of overlying convolutions each of which were 9 inches long, and that such length of convolutions would be sufficient for the purpose for which the roll was made, it would be wasteful to make said convolutions longer.

(Answer objected to, so far as it is limited to a condition not contained in the question.)

X Q. 77. Suppose the outside sheets or convolutions of an oval roll to be $15\frac{1}{2}$ inches or so in length, and the inside or smaller sheets to be but 9 inches in length, would such a roll, in your opinion, be within the claim of patent 325,410?

A. The dimensions or length of the sheets of paper of the bundle referred to in the claim of said patent are not therein given, but from the description of the roll contained in said patent I do not find that a roll or bundle of paper, having external and internal convolutions of the length mentioned in the question, would be otherwise than substantially such a roll as is described in said patent. If the maker of said roll should erect or make the external convolutions thereof

of an excessive length, whereby waste would be incurred, it would be simply a liberty taken by the manufacturer not borne out from an economical point of view.

X Q. 78. Suppose an oval roll to be in its outer sheets or convolutions from 16 to 18 inches, and its inner convolutions about
160 5 inches, would not such roll be a piece-measuring one, to give you substantially the same size of economical sheets as the roll described in the patent, namely, by rotating it one-half a turn in the hand, you could tear off on one of its rounded ends a sheet of paper of about 9 inches in length, and when you got to the 9-inch convolutions you could rotate it a whole revolution and thereby get off a 9-inch sheet, and when you got down to the inside or 5-inch convolutions you could give it two revolutions in the hand and then tear a sheet which would be about ten inches in length. Would not such be a piece-measuring roll and an economical roll, giving paper of sufficient and economical lengths?

A. If all of the convolutions of the roll described in the question provide sheets of a suitable length for practical and economical use, said roll being of oval form, it would be substantially such a roll as is described in said patent. I do not understand that the patent 325,410 embodies any claim to a method of using an oval roll to separate convolutions therefrom, but that the user having legally acquired said roll is obviously at liberty to unwind it in such manner as may seem best to him.

(Answer objected to, as not responsive and question repeated.)

X Q. 79. Question repeated.

A. It being an oval roll, it provides conveniences for measuring the pieces torn off, but the described manner of removing the convolutions from the roll would not, I think, prove to be an economical manner of manipulating the roll to separate the pieces, for considerable time would be consumed in so manipulating it as compared with the roll described in 325,410.

X Q. 80. Would such a roll as is described in X Q. 78 be within the claim of patent 325,410, and why?

A. This roll is such a one as I have referred to in my answer to cross-question 78.

Adjourned to Monday, Jan'y 30th, at 1 p. m.

161 NEW YORK, *January* 30, 1888—2 p. m.

Met pursuant to adjournment.
Present, counsel as before.

The cross-examination of Mr. H. A. CHAPIN resumed:

(Answer objected to, as not responsive, and question repeated.)

Cross-question 81. Question repeated.

Answer. My answer to cross-questions 78 and 79 both refer to the roll which I mentioned in my answer to cross-question 80, and in my answer to cross-question 78 I said "if all the convolusions of

the roll described in the question provide sheets of a suitable length for practical and economical use, said roll being of oval form, it would be substantially such a roll as is described in said patent."

X Q. 82. Can you not answer cross-question 80 categorically, since the size of the sheets and the convolutions of such a roll is given in cross-question 78? If so, please do so; if not, state why not.

A. I have already said several times that the claim of patent No. 325,410 does not give the dimensions of any sheets or pieces of paper, and for that reason I am unable to say that the dimensions of sheets or the length of convolutions of a roll given in the question belong to a roll which should come under such claim.

X Q. 83. Is the roll now shown you, Complainant's Exhibit V, a roll or bundle of continuous paper which comes under the specification and claim of patent No. 325,410?

A. The claim of said patent 325,410 refers to a bundle of paper "whose internal diameter is greater than the thickness of paper, substantially as described." The roll referred to in the question, Complainant's Exhibit V, has not an internal diameter greater than the thickness of the paper, and is simply an ordinary cylindrical roll of paper. The specification of said patent, in describing how the roll is made which said patent refers to, makes use of the following language: "I make the internal diameter of the band
162 when in cylindrical form of not less than twice the thickness of the band at any one point, and the proportions which I prefer to employ are as follows: width of paper from 4½ to 5 inches; internal diameter of band when in cylindrical form about 2¾ inches; external diameter from 4 to 5 inches." Said specification, in referring to the form of the roll there described, says: "In carrying out this object I have put up one or more lengths of paper in the form of a continuous band, (as contradistinguished from a roll,) of oblong or oval shape, the short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper. The band I make of a thickness calculated to produce sheets severed at the point stated of practical and economical lengths from the time the bundle is opened until it is consumed." Owing to the variations of said roll, Exhibit V, and shape thereof, as referred to above in this answer, from the roll described in the specification and referred to in the claim of patent 325,410, it does not appear that said roll, Exhibit V, is such a roll as is described and referred to in the specification and claim of said patent.

X Q. 84. How much of the center portion of said roll, Exhibit V, would you deem it necessary to remove in order to bring said roll within the claim of patent 325,410?

A. To change the roll, Exhibit V, so that its internal diameter would be greater than the thickness of the paper, as stated in said claim, the internal diameter of said exhibit should be enlarged so that it would be greater than the thickness of the paper, and the latter being about two inches and a half the diameter of the center

should exceed that, whereas at present it is about one inch. By the term thickness of paper I mean to be understood the united thickness of the roll on opposite sides of the hollow center as though one were measuring the entire thickness of an oval roll of paper transversely across the edge of the roll between its short rounded ends.

163 X Q. 85. Is not the only structural feature which is involved by claim of patent 325,410 paper wound on itself, so as (to) form a roll, having a diameter greater than twice the thickness of the paper wound at any one point across it, or, in other words, a diameter very much greater than shown in roll Exhibit V?

A. I do not understand, when considering the claim of patent 325,410 in connection with the drawing and specification thereof, that "the only structural feature which is involved by claim of patent 325,410" is paper wound on itself so as to form a roll having a diameter greater than twice the thickness of the paper wound at any one point across it, or greater than the diameter of the hollow center of said roll Exhibit V. The only structural features referred to in the claim of said patent, specifically, are those of a bundle of paper consisting of one or more lengths formed into a continuous band and whose internal diameter is greater than the thickness of paper. And, in seeking in the specification and drawing of said patent for all the information which is therein given concerning the bundle of paper referred to in the claim of said patent, I find that the other structural features of said bundle of paper are that said roll or bundle is given an oval form, and that the desirable length of the convolutions of said bundle are arrived at by commencing to wind said band on a mandrel or center of such size to produce internal convolutions of suitable length or diameter as the maker thereof may deem best for use, and to find such length of band as may be requisite to produce sheets or convolutions of paper of a length suited to to practical and economical use.

X Q. 86. Then you consider such structural features, to bring it within the claim of said patent, to be the winding up of sufficieut paper in the roll that you can get off the roll sheets varying between two limits of dimensions; such roll when it is squeezed or pressed will take an oval form so as to present rounded ends?

164 A. I learn from the patent 325,410 that the structural features of the roll therein shown, described and claimed are those to which I have referred at considerable length in my answer to cross-question 85, and I hardly see how I can make any description of said roll more clear and explicit than is set forth in said answer. As to the limits of dimensions of sheets mentioned in the question, of course a roll of paper will necessarily consist of lengths of convolutions of varying dimensions between the internal and external ones, and such is the roll described in said patent; but the patentee sets forth that he takes care that the internal convolution shall be of such a limit as to produce a sheet suitable for practical and economical use, meaning, of course, a convolution that is not useless, and that the maximum length of the convolution of the bundle of paper shall be also of a practical and economical

length for use. I understand also that the patentee of said patent sets forth therein that he makes of said band of paper a roll of oval form by compressing its sides, and such a roll as I have just mentioned embodying features of capability of production of sheets, such as I have just mentioned, and having, or capable of having, the oval form shown and described in said patent No. 325,410, given to it is such a roll as is referred to in the claim of said patent.

X Q. 87. This compressing the roll or continuous band into oval form by squeezing its sides together is the use he puts the roll to, as stated in the specification and shown in the drawing, and what he claims is not such rounded ends on an oval-shaped bundle, but simply, as stated in the claim, "a bundle of paper consisting of one or more lengths formed into a continuous band whose internal diameter is greater than the thickness of paper." Am I not right? If not, wherein am I wrong?

A. I do not understand that compressing the roll as stated in the question is what may be termed the "use" thereof, but one of the processes of the manufacture of the roll whereby after winding it is brought to an oval or oblong form; and I further understand
165 that the bundle of paper referred to in the claim of patent 325,410 when in a state of complete production for use consists of a roll of oblong or oval shape. The patentee states in the specification of said patent that "the oblong flattened form of the bundle enables it to be packed in cases to greater advantage than if it were in cylindrical form, the small interstices between the rounded ends being the only spaces left unoccupied," whereby I understand that the patentee in the manufacture of said rolls contemplates the winding of the band of paper as heretofore described, and of then giving it said oblong flattened form, thereby completing the bundle, which results in the advantages as to packing and transportation above referred to, although the patentee does not restrict himself to flattening said bundles before shipping or packing the same, for it is obvious that the wound band or bundle of paper is capable of being easily flattened by any one for the purpose of bringing it to an oval shape, whereby it is provided with the short, rounded ends mentioned in the specification.

X Q. 88. Would not the round roll, Exhibit V, press into oval shape or form when packaged tightly in cases for transportation?

A. It would.

X Q. 89. I show you substantially such a roll as I described in the 78 cross-question, and which, in rotating and tearing off on the rounded ends, as stated in 325,410, you could get sheets off from beginning to end, first commencing about 9 inches in length, and which you are unable say whether it is or is not within the claim of the patent, (X 82, A,) and now ask you to say whether or not such roll is not of oval form, does not contain rounded ends, and would not give when rotated substantially the length of sheets stated in cross-question 78, would it not when packed pack economically as an oval roll?

(Roll shown witness marked Defendants' Exhibit No. 1.)

A. The roll Defendants' Exhibit No. 1, referred to in the question, is of oval form, and consequently has rounded ends.
166 The outer convolution of said roll has a length of about 15½ inches, and the inner convolution thereof has a length of about 5½ inches, and obviously the intermediate convolutions of said roll vary proportionately between said two lengths. I presume that sheets may be torn from said roll, Defendants' Exhibit No. 1, in the peculiar manner of manipulating the same, which is described in cross-question 78. I said, in answer to cross-question 78, that if all of the convolutions of the oval roll referred to in that question provide sheets of suitable lengths for practical, economical use it would be substantially such a roll as is described in said patent. In referring to the internal diameter of the roll, Defendants' Exhibit No. 1, I find that it has not an internal diameter greater than the thickness of the paper, and therefore one structural feature of the roll referred to in the claim of patent 325,410 is not found in said roll, Exhibit No. 1.

Adjourned to Tuesday, January 31st, at 10½ a. m.

NEW YORK, *January* 31*st*, 1888.

Cross-question 90. If the internal diameter of roll Exhibit No. 1 was equal to or greater than the thickness of the paper, *i. e.*, twice the thickness of the paper at any one point, would it be within the claim of the patent 325,410?

Answer. I have already several times clearly set forth, in the language of the patentee, the structural features of the roll or bundle of paper described and claimed in patent 325,410, the patentee saying: "I make the internal diameter of the band, when in cylindrical form, of not less than twice the thickness of the band at any one point." In view of the above-quoted language of the patentee, it is evident that if the said roll Exhibit No. 1 had an internal diameter such as is stated in said quoted language, and if the convolutions of paper from said central diameter to the outer end of the band
167 be all of such length as produce sheets of a practical and economical length for use, it would be such a roll or bundle of paper as is referred to in the specification and claim of said patent.

X Q. 91. Then, according to the claim of the patent, another element must be present besides the shape of the roll (oval form), a diameter equal to or greater than the thickness of the paper, namely, such a size of internal and external convolutions as will give sheets of an economical length. Am I not to understand this to be so in view of your last answer relative to roll paper, Defendants' Exhibit No. 1.

A. The question involves substantially so much repetition of questions that have been already propounded to me that I believe I can answer it no way so well as by referring to my answer to X. Q. 85, the latter part of which is in the following language, and I believe that it fully answers the last question. In seeking in the specification and drawing of said patent for all the information

which is therein given concerning the bundle of paper referred to in the claim of said patent, I find that the other structural features of said bundle of paper (other than its having a diameter greater than the thickness of the paper wound at any one point across it,) are that said roll or bundle is given an oval form, and that the desirable length of the convolutions of said bundle are arrived at by commencing to wind said band on a mandrel of such size or diameter as the maker thereof may deem best to produce internal convolutions of suitable length for use, and to wind such length of band as may be requisite to produce sheets or convolutions of paper of a length suited to practical and economical use.

X Q. 92. Then if the paper roll, Defendants' Exhibit No. 1, had an internal diameter equal to twice the thickness of the band at any one point, and the internal and external convolutions, and all the intermediate ones produce sheets of practical and economical length for use, then it would come within the claim of patent No. 325,410, would it not?

168 A. The roll, Defendants' Exhibit No. 1, being a roll of oblong or oval shape, if it had an internal diameter greater than the thickness of paper or not less than twice the thickness of the band at any one point, and having the internal and external convolutions and all intermediate ones of a length calculated to produce sheets of practical and economical lengths for use it would evidently be such a roll as is described and claimed in patent No. 325,410.

X Q. 93. Would not such a roll as I now present to you and which is marked "Defendants' Exhibit No. 2," having inside diameter $2\frac{3}{4}$ inches, outside diameter $5\frac{1}{2}$ inches, come within the statement contained in your last answer and be within the claim of patent 325,410?

A. I understand by the question that the roll Exhibit No. 2 as stated in the question is assumed to have an internal diameter when in cylindrical form of $2\frac{3}{4}$ inches and an outside diameter of $5\frac{1}{2}$ inches, which gives an internal diameter of not less than twice the thickness of the band at any one point; said roll Exhibit No. 2 having the above-referred-to dimensions, and being capable of taking an oval form, and of its internal and external convolutions and all intermediate ones are of a length calculated to produce sheets of practical and economical lengths for use it would evidently be such a roll as is described and claimed in patent No. 325,410.

X Q. 94. Will you say in your opinion that the roll Exhibit No. 2 will not give sheets from its convolutions of sufficient lengths for economical and practical use, since its internal diameter is about the same as the internal diameter of complainant's roll Exhibit B, and alleged infringing roll Exhibit A?

A. I find by measuring the external convolution of the Defendants' Exhibit No. 2 that it is about $17\frac{1}{2}$ inches long, and that the outer convolution of complainant's roll Exhibit B has an outer convolution of slightly over 13 inches. If the extreme length of convolution in complainant's roll B has a sufficient length for practical

and economical use, then the difference between the length
169 of said last-named convolution and the outer one of Defendants' Exhibit Roll No. 2, having a length of about $4\frac{1}{2}$ inches greater than the outer one of said roll B, would seem to present an element of waste. I do not understand that the patentee, as I have already several times remarked in my previous answers, prescribes in patent 325,410 any definite lengths of internal and external convolutions of the roll which is described in said patent, he having stated therein his preferred dimensions, and if a roll be made similar to Defendants' Exhibit No. 2, having the above-described internal diameter and thickness of band, and it contain convolutions capable of producing sheets of paper of practical and economical lengths for use, it would evidently be such a roll as described in claim of patent 325,410, it being understood that the said roll, Defendants' Exhibit No. 2, is an oval roll, or one capable of being given an oval form.

X Q. 95. The roll, Defendants' Exhibit No. 2, being oval in form and having the same internal diameter as the rolls manufactured by complainant, oval King, and thus giving the same size of sheets and internal convolutions, will you testify it is not within the claim of patent 325,410 because it contains on its outer convolutions sheets running to a larger size than that contained on the outer convolutions of the oval King roll, Exhibit A?

A. I cannot testify concerning said roll Defendants' Exhibit No. 2 any differently from what I have done in my answer to cross-question 94, for I do not find anything in patent No. 325,410 descriptive of the construction of the roll therein described and claimed, which limits the length of the external convolution of the roll.

X Q. 96. How much paper would have to be used off of the Defendants' Exhibit No. 2 before it would be brought down to the convolution giving the size of sheet shown on the external convolution of Complainant's Exhibit A and B Rolls?

A. Somewhere about one-half inch in thickness.

X Q. 97. Then, if this one-half inch of thickness of band
170 was taken off of roll Defendants' Exhibit 2, there would be no doubt, would there, of its being within the claim of patent 325,410, since you appear to be able to testify that rolls A and B are within such claim?

A. I can give no better answer to the last question than the one which I gave to X Q. 95, and in answer to X Q. 94, for if I should attempt to do so I should have to repeat substantially the substance of those answers. In addition to what I said in those answers, I say, once more, that I do not find anything in the patent 325,410 which limits the length of the outer convolution of the roll therein described and claimed.

X Q. 98. You have testified, have you not, that rolls A and B are within the claim of patent 325,410, or substantially to this effect?

A. I testified, in answer to direct question 5, concerning the roll Exhibit A mentioned in the last question, as follows: "I find that said exhibit possesses the same structural peculiarities as are de-

scribed in said oval-roll patent, and as more particularly pointed out in the single claim thereof." I also testified, in answer to direct question 12, as follows: "Referring to complainant's roll Exhibit B, I find that it does fall within the description of the roll referred to in said patent, inasmuch as both the inner and the outer convolutions thereof, and all of the convolutions between the two, are capable of being separated from the band forming the roll, and to produce sheets of paper of a size desirable for use." I also stated, in answer to direct question 13, that I found the defendants' roll Exhibit A as falling within the description of roll referred to in the specification of said oval-roll patent, and covered by the claim of said patent. I have stated, also, in my answer to X Q. 94, that the roll Defendants' Exhibit No. 2 would evidently be such a roll as is described and claimed in patent 325,410, if the convolutions thereof are capable of producing sheets of a practical and economical length for use.

171 X Q. 99. Then if you have testified that the oval rolls like A and B are within the claim of patent 325,410, are you prepared to testify that a roll like Exhibit No. 2 is not within the claim simply because it has a half inch in thickness of paper more than said rolls A and B on the outer periphery thereof?

A. I find no authority in patent 325,410 for testifying that the addition of a half inch in thickness, more or less, to a band or bundle of paper such as is shown in said Exhibits A and B would constitute a bundle of paper differing essentially from that described and claimed in said patent; for, as I have already several times said, I find nothing in said patent limiting the length of the external convolution of the roll referred to therein.

X Q. 100. Please look at the roll now shown you and which is marked "Defendants' Exhibit No. 3," and state whether you find it to be an oval roll of unperforated paper, and whether it has an internal diameter at least equal to if not greater than twice the thickness of the band at any one point, so as to bring said roll within the language of the specification as well as the claim of patent 325,410; and is it not within the said claim of said patent?

A. I find upon comparing the said roll of Defendants' Exhibit No. 3, with the oval roll on Complainant's Exhibit Y, that it is substantially the same as the roll on said last-mentioned exhibit, concerning which I have already testified, excepting that the said roll Exhibit No. 3 is not a perforated roll. I also find that said roll Exhibit No. 3 has an internal diameter when in cylindrical form of not less than twice the thickness of the band at any one point—that is to say, equal to the thickness of said band; and so far as the said internal diameter and the said thickness of the band are concerned, they refer to a structural peculiarity of the roll described in said patent 325,410, in that the internal diameter of said roll No. 3 when in cylindrical form is not less than twice the thickness of the band at any one point. If all of the convolutions of said roll Exhibit No. 3 are of a length to produce sheets when severed at the points

172 stated in patent 325,410 of practical and economical length for use from the time the bundle is opened until it is con-

sumed, said roll, Defendants' Exhibit No. 3, when given an oval form would evidently be such a roll as is described in said patent, and referred to in the claim thereof.

Recess until 2.30 p. m.

X Q. 101. Please look at the roll now shown, and which is marked "Defendants' Exhibit No. 4," and state whether you find it to be an unperforated roll of paper, and whether it has an internal diameter at least equal to if not greater than twice the thickness of the band at any one point, so as to bring said roll within the language of the specification as well as the claim of patent 325,410, and is it not within the said claim of such patent. This roll presented to you is similar to the roll Defendants' Exhibit No. 3, except that it is proportionately smaller in every respect. Do you therefore make the same answer to this roll as you did to the last one?

A. I find upon examining the roll Defendants' Exhibit No. 4 that it has an internal diameter equal to if not greater than twice the thickness of the band at any one point, and that it is a roll of unperforated paper. I find that said roll Defendants' Exhibit No. 4 has, when in cylindrical form, an external circumference slightly exceeding 7¼ inches. If all of the convolutions of said roll Exhibit No. 4 are of a length to produce sheets when severed at the points stated in patent 325,410 (when given an oval form) are of practical and economical lengths for use from the time the bundle is opened until it is consumed, said roll Defendants' Exhibit No. 4 would evidently be such a roll as is described in said patent and referred to in the claim thereof. The length of the internal convolution of said roll Exhibit No. 4 is about 3 and ⅜ of an inch in length, the internal diameter of said roll being about 1 and ⅛ of an inch, the external diameter being slightly over 2¼ inches.

173 X Q. 102. Please look at the roll now shown you and which I have caused to be marked "Defendants' Exhibit No. 5," which is an oval roll having an internal diameter of the band when in cylindrical form not less than twice the thickness of the band at any one point, the internal diameter being four inches and the external diameter 5½ inches. State whether this roll does not give short, rounded corners and which if revolved in the hand one-half a revolution will give at the commencement a sheet of paper or one-half convolution 8⅝ inches in length, which is about the length of the sheet yielded by the Hicks roll at its last revolution, and will not this roll on its last convolution on a full revolution of the roll yield a 12½-inch sheet, which is about the length of the last sheet or outside convolution of the Hicks roll?

A. In answering this question, I assume that the dimensions of Exhibit No. 5 given therein are correct; I find upon measuring the outer convolution of said roll that it has a length of 17⅜ inches, and that the length of the inner convolution is about 12½ inches, and that said roll, being of oval form, has short, rounded ends, and that one-half of the said outer convolution thereof is about 8⅝ inches in length, and that its inner or last convolution, as stated above, would have a length of about 12½ inches.

X Q. 103. Would not such a roll as stated in the last question be a piece-measuring roll, an economical roll, giving paper of sufficient and economical lengths, and would it not be within the claim of patent 325,410?

A. The said roll, Defendants' Exhibit No. 5, has the short, rounded ends of the bundle of paper referred to in said patent 325,410, which, as therein stated, serve "as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper," and thereby said pieces, so to speak, are measured or have the length of a convolution of the roll; and if the dimensions of the convo-
174 lutions of said roll Exhibit No. 5, when severed at the points stated, are of practical and economical lengths, from the time the bundle is opened until it is consumed, it is evidently a roll or bundle of paper such as is described in said patent 325,410 and referred to in the claim thereof.

X Q. 104. If the paper is severed at the outer convolution, one-half a convolution at a time, will such sheets be of economical length, and is the roll No. 5, being capable of such manipulation, a roll within the claim of patent 325,410?

A. The conditions of manipulation, considered in the question, do not alter the construction of the roll nor do I understand that any particular mode of operating the roll is the subject of the claim in said patent, and I am unable to say whether the court would hold that a means of manipulation could be considered as having any bearing upon the question of the likeness of the roll Exhibit No. 5 to that described and claimed in patent 325,410.

X Q. 105. In giving your answers to questions 17 to 23 on the direct you treated the roll on Exhibit Y the same as if — were an unperforated one, did you not?

A. I believe in giving said answers that I did not consider or refer to the perforated features of said roll.

X Q. 106. Such roll on Exhibit Y is in fact a perforated one, is it not?

A. It is.

X Q. 107. The sheets thereon in its operation on the fixture called "Universal" do not break off or separate at the short, rounded ends, except only in case the line of weakness or of perforation happens to be on such short, rounded ends on the roll. Is not this so?

A. I find by operating the roll mentioned in the question on said Exhibit Y that the dies separate at or about the short, rounded end of the roll.

X Q. 108. I perceive in tearing off this sheet you drew the paper sidewise with a wrenching motion, which caused it to separate intermediate between two lines of perforation at the short,
175 rounded end; was not this accidental, as several sheets you subsequently drew off and several that I took off caused the sheets to separate at the line of perforation, is not this so?

A. During the various sessions of the hearing in this case when I have been testifying, I have frequently operated the roll upon

said Exhibit Y, and found that the sheets of said roll are quite as likely to separate therefrom at one of the ends of the roll as they are to *to* tear at the perforated lines in the roll.

X Q. 109. Do you get off the roll and fixture Y an entire convolution of the paper at each pull on it?

A. The pieces which I have torn off from said Exhibit Y are substantially of the length of the convolution of that roll; one which I last tore off is slightly in excess of one convolution.

X Q. 110. I have just operated the roll ten times without any special manipulation thereof, and I have found the sheets separated at the perforations, eight of them of half the convolution and two of them the whole convolution. Is not, therefore, the operation of the roll in this respect irregular, and the separation of the sheets depending more upon the line of weakness or perforations than upon a short, rounded end to cause the line of separation?

A. I am aware that owing to the perforations in the band constituting the roll on Exhibit Y, the paper is easily separated on said lines of perforations, and it is also easily separated between the lines of perforations at one of the rounded ends of the roll by pulling upon the end of the paper, and my experience in manipulating said roll on Exhibit Y has been such as I stated my in answer to cross-question 108.

X Q. 111. Is there any other element described or shown in patent 357,993 for severing the paper except the serrated or knife edge marked M?

A. The plate M referred to in the question is described in the specification of patent No. 357,993, between line 55 and 60 thereof, in the following language: "Between the arms E E, and
176 near the inner portions, extends a plate M, the outer edge of which may be made either plain or serrated, though I, by preference, make it serrated as shown in figure 1." The said plate M and its functions are again referred to in the specification of said patent in the following language, beginning at the bottom of the first page, namely: "It will be observed that the plate M performs the function of a stop for arresting the forward rotation of the roll and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper; and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper must necessarily cause the severance of the paper at some point at or near the point end leaves the body of the roll." From the above-quoted portions of the specification of said patent I understand that the inventor attributes to said plate M the function of arresting the forward rotation of the roll, and holding the roll while the section of paper is being removed, as well as that of a cutter for severing said paper; the said element marked M is the only one shown in said patent which is said to have the function of a cutter.

X Q. 112. I notice in the second claim of patent 357,993 the language, "of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at

the limit of the operation in the opposite direction," you have ascribed to the serrated edge M, as quoted from the specification, the function of a stop for arresting the roll at the limit of its motion, &c. Now, what second element do you find in that patent for arresting the motion of said roll in the opposite direction, the language of the claim being in the plural "stops"? Also state in your answer what language you find in the specification to warrant the statement of an additional stop "for arresting the motion of the roll in the opposite direction."

177 A. The operation of the roll hung in the fixture shown in the drawings, figures 2 and 3 of patent 357,993, is described in the following language: "The depending end C is grasped by the user and pulled, and the roll is thereby rotated until arrested by its upper portion coming in contact with the plate M, as shown by the dotted lines in Fig 2. As soon as this arrest of the motion of the roll takes place the depending portion of the paper becomes drawn tightly over the edge of the plate M, and can be severed at that point, either by a continued pull on the paper or by a lateral tearing motion. The roll is released by the severance of the ends, and swings back toward first position, bringing up against the under side of the plate M, and by the jar imparted to it by contact with said plate causes the new end of paper to drop down into position, to be grasped by the next user." From the foregoing description of the operation of the roll and the function of said plate M, I understand that said plate performs the function of two stops, inasmuch as it stops the roll when pulled in one direction, and it stops the motion of the roll when it swings in the opposite direction; and my understanding of the word "stops" in the plural, as used in said claim 2, is that said word "stops" is used because the plate M performs the function of stopping said roll at two different points in its oscillatory movements.

X Q. 113. Then one element or ingredient performs both duties in the fixture described in the specification of patent 357,993?

A. In one construction shown in said patent the bar M serves to stop the roll in both of its oscillating movements, but in another figure in said patent, namely, figure 6, which is described as a view of a modified form of invention, there is shown a stop indicated by A^2 on the arm of the fixture in which the roll is hung, whereby the motion of the roll is arrested when its end is pulled upon. In the construction shown in said figure 6 an arm A^1 is attached to the end of the roll "to throw the roll out of balance" and to strike said stop A^2 when the end of the roll is pulled upon. Therefore,

178 in said patent other stops than the one provided by said plate M are shown in connection with an arm on the roll to arrest the roll when a round roll is used when the end thereof is pulled upon; but when the construction is such as is shown in figures 2 and 3 of said patent the bar M performs the said function of two stops.

Adjourned to Wednesday, February 1, 1888, 10.30 a. m.

NEW YORK, *February* 1, 1888.

Cross-question 114. Then when claim 2 refers to a fixture with an oval roll it refers to but one element or ingredient (serrated bar M) which performs the functions of two stops?

Answer. In considering the mechanical elements of said claim 2 of patent 357,993, I find that they consist of an "oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described;" and according to the description of the device in the specification of said patent and to the drawings thereof, said stops are attached to or are a part of a fixture in which said roll is hung or supported so that it can be oscillated. I also find that the stops there referred to are indicated in language which is not limiting in its terms as to stops of any specific construction. Referring again to the "bar M" of said patent and its described functions, I find that it performs as truly the functions of two stops for arresting the opposite oscillating movements of the roll as it could were it divided longitudinally into two parts and said two parts were secured on the fixture independently of each other, against each of which the roll is swung alternately, for said roll strikes different portions of said "bar M" when swung forward to have a piece of paper severed therefrom by pulling its end, and swung in the opposite direction to cause the end of the paper on the roll to drop to a pending position so that
179 it may be conveniently taken hold of by the next user. And since the "stops" for the roll of the fixture are both provided, from evident reasons of economy, by said single "bar M," which has the functions of two separate stops, I find that the "stops" referred to in said claim 2 are both found in the structural features of the things or contrivances referred to in said second claim. I find that the element referred to in the question as "bar M" is in the patent called "a plate M," and it is there stated that the outer edge thereof "may be made either plain or serrated."

(Answer objected to, as not responsive, and question repeated.)

X Q. 115. Question repeated.

A. I said in my last answer that the said bar or plate M, in connection with an oscillating roll, which I understand to be an oval roll, performs the function of two stops.

X Q. 116. And in oval roll and fixture shown in Complainant's Exhibit Y, you do not find, do you, a serrated bar to perform the function of two stops?

A. The oval roll and fixture shown in Complainant's Exhibit Y does not contain any stops consisting of a serrated or a plain edge bar, but it does contain stop elements which perform the functions described in patent No. 357,993, of arresting the movement of an oscillating roll in two opposite directions, which stops consist of a part of a fixture against which the roll is swung when the end thereof is pulled upon, and the wall or thing on which the fixture is hung,

against which the roll swings when released by the separation of the piece of paper therefrom.

X Q. 117. Is not this fixture to which you refer in your last answer one which has been in use for many years prior to the Hicks fixture in controversy? In fact, have you not seen it yourself in use over the country for many years? I am referring to the fixture, and not to the roll of paper on it.

A. I am not able from my own knowledge or recollection to
180 say that the fixture to which I refer in my last answer is one which has been in use for many years prior to the Hicks fixture in controversy.

X Q. 118. Assuming such to be the fact, that this fixture existed long prior to the invention of the Hicks fixture, but with a round roll on it, and it to have been attached to a wall in manner as the Universal fixture is shown to be attached on Exhibit Y, would you find in that fixture an element conforming to the serrated bar M therein, and would such element still be the eyes of the top plate which holds the arms containing the roll of paper?

A. In my answer to cross-question 116 I referred to Exhibit Y as containing an oval roll, and therein I referred to the operative elements embodied in that fixture, which are adapted to co-operate with an oval roll of paper to sever pieces therefrom, as stated in said answer. I did not say that the fixture on Exhibit Y contains, specifically, a stop consisting of a serrated or plain edged bar M, but I said that said fixture contained stop elements, or rather that said Exhibit Y did, which performed the functions described in patent 357,993, of arresting the movement of an oscillating roll in two opposite directions, which oscillating roll I intend to be understood is one of oval form. I do not understand that a round roll of paper placed upon the fixture Exhibit Y, not including the metallic core plate which is thereon, but having simply an arbor or shaft between its arms on which said round roll is caused to rotate when the end of the paper is pulled, would demand the co-operation of any stop devices, such as are employed when an oval roll of paper is hung on the core plate of said Exhibit Y, and given an oscillating movement as above described.

X Q. 118½. If this old fixture, which is here called the Universal on Exhibit Y, has not got two stops which are the equivalent of serrated or plain edged bar M when the round roll is used upon said fixture, how can they be there when an oval roll is hung therein in place of a round roll?

A. In my evidence heretofore given I believe I have not
181 said that "this old fixture" which is referred to in the question, contained the two stops which have the equivalent functions of a serrated or plain edge bar M, but I referred to the Exhibit Y containing said fixture, the part on which it is hung, its metallic core plate, and an oval roll of paper hung on said core plate and capable of an oscillating movement between the arms of the fixture; nor have I anywhere said that said Exhibit Y contained specifically the serrated or plain edged bar referred to in the last question.

X Q. 119. Do you, in giving your construction of the second claim

of patent 357,993 and the including of the wall to which fixture Y may be attached, an element of the combination and as the equivalent of a stop for roll "at limit of oscillation in opposite direction," do it upon the assumption that Hicks was the first to stop a roll of toilet paper from rotating in a fixture for the purpose of getting off a limited amount of paper or give size of sheet as each sheet is withdrawn from the fixture?

A. I take said patent 357,993 and an earlier patent to Hicks, No. 325,174, as indicating *prima facially* that Hicks was the first to stop an oval roll of toilet paper from oscillating in a fixture for the purpose of getting off a limited amount of paper or given size of sheet when the end of the band composing the roll is pulled upon or as each sheet is withdrawn from the roll.

X Q. 120. If Hicks was not the first to stop a roll, either oval or round, to cut off each time a given amount of sheet in a fixture, would he not be limited to his specific means for stopping and cutting off the sheet, and would he be entitled to include the frame-work of the fixture and the wall to which all fixtures must necessarily be attached for performing their functions, which frame-work and wall you have included in the Exhibit Y as the equivalent of the stops, so called, of second claim of patent 357,993?

(Counsel for complainants here states that he has given counsel for defendants great latitude in the cross-examination of this witness, but that the line of examination now being pursued is so grossly
182 incompetent that he cannot permit it to continue without objection, and he therefore objects to the above question, as not calling for any expert opinion, but for a construction of a patent and an opinion in patent law that the witness, as such, is not competent to give. This objection to apply to all further questions in this line of examination.

(Defendants' counsel referred in the question before the last to what the witness had taken into consideration in construing the second claim, counsel supposing the complainant's expert had probably had called to his attention before testifying the state of the art. The last or 120th question has been propounded to the witness with this supposition, as answer to 119th question was not satisfactory upon the point. In view of the objection, however, of complainant's counsel, counsel will not further seek to inquire into the witness' knowledge of the state of the art.

(Counsel for defendants does not, however, under the circumstances stated, consider that there is anything "grossly incompetent" about the question, and he disclaims any intentian of asking any question that is incompetent or outside of the issues in the case.

(Question 120 withdrawn.)

X Q. 121. I refer you to the latter part of your answer to the 33d direct question, wherein you bring Exhibit Y within the third claim of patent 357,993, by stating substantially that it is an oscillating roll of toilet paper, having its bearings out of line with its center of gravity. If you find such a feature in Exhibit Y, I wish

you to give us your definition of center of gravity or center of weight.

A. In answering the said direct question 33 I quoted therein the words of patent 357,993, descriptive of the manner of hanging the roll of paper therein referred to in a fixture to operate it, and I do not undertake to give any other meaning to the words of the patent than I am able to derive from said words themselves: and in speaking of applying the roll to the fixture the patent says: "The core
183 plate is first slipped into it and is then connected to the arms E E by springing the latter outward sufficiently to permit the pivots or journals of said core plate to be entered in the bearings H H of said arms, as will be readily understood. By preference the pivots or journals are located out of line with the center of gravity of the plate, in order that one side of said core plate shall normally hang downward and tend to hold the roll of paper in substantially the position shown in Figs. 2 and 3. This result may be effected either by arranging the pivots eccentrically to the core plate or by attaching them centrally thereto, and having one side of the core plate heavier than the other." I understand that the words "the center of gravity" of the plate used in said patent to mean to one side of a longitudinal line drawn centrally between the opposite edges of said plate, so that when said plate is hung upon pivots attached thereto to one side of said center line they are to one side of its center of gravity within the meaning of the patent. I find in the patent this further reason for what I have stated to be my understanding of the words "the center of gravity of the plate," for that is explained in the following language of the patent: "In order that one side of said core plate shall normally hang downward."

X Q. 122. Does it not mean, instead of pivoting to one side of a longitudinal central line that you must pivot a little outside of the core plate as shown in Exhibit X fixture, so as to get the roll to lie in an oblique position as in said exhibit shown, and as in figures 2 and 3 of patent No. 325,174 is seen?

A. I am unable to express my understanding of the meaning of the patent as to the pivoting of the core plate any more clearly than I have done in my answer to cross-question 121, wherein I have quoted the words of the patent relating to said pivoting quite fully.

X Q. 123. The specification refers to attaching the pivots
184 eccentrically to the core plate in line 80, page 1; this would give the position shown in figures 2 and 3 (line 77), and cause the roll to assume an oblique position as found in Exhibit X. In line 81, page 1, the other or alternate construction calls for the weighting of the core plate on "one side heavier than the other." This would evidently cause the roll to assume the same oblique position or throw it out of its center of gravity, (line 74.) Now can you, in the face of this specification, say that the defendants' roll found on Exhibit Y is thrown out of its center of gravity or out of a vertical position on such fixture, and thus bring it within claims 3 and 5 of patent 357,993?

A. The specification of patent 357,993, in speaking of the result of hanging said core plate so that one side shall normally hang

downward, "may be effected either by arranging these pivots eccentrically to the core plate, or by attaching them centrally thereto, and having one side of the core plate heavier than the other," by which I understand that one means of producing that result is to place the pivots of the core plate to one side of a longitudinal central line drawn between its opposite edges, as said pivots are placed in the core plate on said Exhibit Y, and that another means of producing that result is by placing the pivots on the core plate in the position shown in figure 2 of said patent. So far as I am able to measure the position of the pivots in figure 3 of said patent, it occupies a position equidistant between the opposite sides of the roll of paper there shown, thereby indicating to me that the pivots on the core plate which supports the roll in said figure 3 have their sides in the same plane as the sides of the core plate. And I find, furthermore, by measuring on said figure 3, that the pivot of the core plate is considerably nearer one end of the roll than the other, which explains to me the meaning of the specification which I quoted in my answer to X Q. 121, and I find that the pivots on the core plate of Exhibit Y are quite to one edge of that core plate.

Recess.

185 Cross-question 124. Does not the language of the third claim of patent 357,993, namely, "its bearings," refer to "the pivots of journals" on lines 72, 73, page 1, of the specification, *i. e.*, "pivots or journals of said core plate" (line 69)?

Answer. I understand that the words "its bearings," in claim 357,993, refer to the core plate pivots.

X Q. 125. Having reference to the fifth claim, does not the language "of an oscillating core plate weighted on one side of its pivots," imply that there are two sides to the core plate? I refer you in this connection to the language of the specification, lines 81, 82, page 1, "having one side of the core plate heavier than the other."

A. I do not understand that the language referred to in said claim 5 means that the pivots therein mentioned are those which are attached to a core plate having one side of the core plate heavier than the other, but I understand that the words "core plate weighted on one side of its pivots" in said claim five, mean that such core plate has two pivots nearer one edge of the core plate than the other, whereby it is weighted on one side of its pivots.

X Q. 126. To which edges do you refer in your last question, the upper and lower edge, which are marked in the figures 2 and 3 by C, or do you mean the edge nearest the bearings?

A. The edges of the core plate to which I refer in my last answer, in the latter part thereof, are the edges of the core plate which are nearest the rounded ends of the oval roll.

X Q. 127. Will you testify that the patented core plate is not more heavily weighted on one side of its bearings than it is on the other, in order to effect the position of the roll; that is, in order to

make it oblique in position, or, in other words, to throw it out of its center of gravity?

A. The patent states that the result as to the action of the core plate, such as is referred to in the question, may be effected "either by arranging the pivots eccentrically to the core plate or by attaching them centrally thereto, and having one side of the core
186 plate heavier than the other." I find in the drawing of said patent that in figure 2 the pivot of the core plate is apparently attached to one side of the latter, and in figure 3 the pivot is apparently attached directly against the outer edge of the plate, and nearer one end thereof than the other; and those figures may be intended to illustrate the constructions referred to in the specification, but my understanding of the weighted construction of the core plate in said patent is what I stated it to be in answer to cross-question 123.

X Q. 128. Were you to cut out the whole of the tin plate up to its junction with the pipe through which the rod passes to hold the roll in the arms, would not the roll oscillate and perform its functions as well as if the tin were not so cut off; in other words, will the taking off of this weight of tin at all affect the roll with reference to its falling back again into its normal position?

A. The modified construction suggested in the question would, as I understand it, still be one in which there would be an oscillating roll of toilet paper, having its bearings out of line with its center of gravity, as referred to in claim 3 of patent 357,993. As to the removal of the plate suggested in the question, such removal, in my opinion, before the roll should be used up would cause the collapse of the roll, which would be the result of pulling upon the end of the paper to separate pieces, the center of the roll being by the removal of said plate left unsupported, and a result of such collapsing that the roll would not have the oscillating movements referred to when operated that it does have when thoroughly supported by the core plate. The latter part of this answer is given assuming that there is no paper-board core inside the roll.

(Defendants' counsel here offers in evidence five rolls as Defendants' Exhibits 1 to 5, inclusive.)

Redirect examination:

Redirect question 129. You have testified that from the reading of the over-roll patent No. 325,410 you are unable to ascer-
187 tain exactly to what limits, as to length of convolution, the patentee considered his invention to extend, but that you do find that the construction mentioned in the patent as his preferred construction would give a wound roll or band of which the inner convolution would produce a sheet not shorter than $8\frac{3}{4}$ inches, and of which the outer convolution would produce a sheet not longer than from 12 to 15 inches. I now ask you whether or not you find that the convolutions of the defendants' oval roll, marked "Complainant's Exhibit A" would produce sheets of proportions falling

within the said preferred proportions specifically given in the said patent?

A. I do find that the convolutions of the oval roll, Defendants' Exhibit A, produce sheets of proportions falling within the said proportions specifically given in the said patent; finding that the outer convolution of said roll is a little more than 13 inches in length, and that the inner convolution of said roll is about $8\frac{3}{4}$ inches in length.

R. D. Q. 130. Do you find that the outer and inner convolutions, or either of them, of Defendants' Exhibit No. 1 fall within the proportions given by the patentee as the preferred proportions of said convolutions?

(Objected to, as immaterial.)

A. I do not find that the said roll, Defendants' Exhibit No. 1, has an outer or an inner convolution whose length falls within the preferred proportions stated in said oval-roll patent, as I find the outer convolutions of said roll No. 1 to be about 16 inches long and the inner convolutions thereof to be about $5\frac{1}{2}$ inches long.

R. D. Q. 131. Same question as to Defendants' Exhibit No. 2.

(Same objection.)

A. I do not find that the said roll Defendants' Exhibit No. 2 has an outer convolution whose length falls within the preferred length of outer convolutions stated in said-oval roll patent, the outer convolution of said roll No. 2 having a length of $17\frac{1}{4}$ inches. The inner convolution of said roll No. 2, as near as I have been able
188 to measure it, appears to have a length of between 8 and 9 inches, which length would bring said convolution within the length of said inner convolution stated in the said oval-roll patent.

R. D. Q. 132. Same question as to Defendants' Exhibit No. 3.

(Same objection.)

A. I do not find that either the outer or inner convolutions of the roll Defendants' Exhibit No. 3 falls within the preferred lengths of such convolutions as are stated in said oval-roll patent, but that the said convolutions have respectively a length of 11 and $5\frac{1}{2}$ inches.

R. D. Q. 133. Same question as to Defendants' Exhibit No. 4.

(Same objection.)

A. I do not find that either the outer or inner convolutions of the roll Defendants' Exhibit No. 4 falls within the preferred lengths of such convolutions as are stated in said oval-roll patent, but that the said convolutions have respectively a length of $7\frac{1}{4}$ and $3\frac{1}{2}$ inches.

R. D. Q. 134. Same question as to Defendants' Exhibit No. 5.

(Same objection.)

A. I do not find that either the outer or the inner convolutions

of the roll Defendants' Exhibit No. 5, falls within the preferred lengths of such convolutions as are stated in said oval-roll patent, but that the said convolutions have respectively a length of about 17½ inches and 12½ inches.

R. D. Q. 135. Referring now to Complainant's Exhibit Y, please state in what position the roll of paper stands normally with respect to the wall or partition to which the fixture is secured.

A. Said roll stands normally at an incline to the said wall or partition, that is the lower rounded ends of said roll is farthest removed from said wall.

R. D. Q. 136. Has the position of the roll referred to the effect to cause it to hang on or off its center, assuming that the wire rod or pivot upon which the roll is suspended is the "center"?

189 A. The lower end of said roll hangs outside of its center, or to one side thereof, assuming that said wire is its center, for the reason, as I stated before, that the roll hangs at an incline to the said wall on which it is suspended.

R. D. Q. 137. State whether or not, in your opinion, an oscillating roll of toilet paper, having its bearings out of line with its center of gravity, as stated in the third claim of the second fixture patent No. 357,993, is different from an oscillating roll of toilet paper hung eccentrically.

(Objected to, as an improper assumption of the meaning of the language quoted contained in the third claim, and further, as indefinite as to what the question means by "hung eccentrically.")

A. The patentee states that by preference the pivots or journal of the roll or core plate are located out of line with the center of gravity of the plate, but that the same result may be effected by arranging the pivots eccentrically to the core plate, whereby I understand that the patentee considers that said two modes of hanging the roll are the equivalents so far as they tend to produce the desired result.

R. D. Q 138. Do you, or not, find that the core plate in Exhibit Y has pivots located or arranged eccentrically thereto?

(Same objection as to language, "arranged eccentrically thereto," as indefinite and vague.)

A. I believe I have already stated that the core plate in the Exhibit Y is pivoted eccentrically to a longitudinal line drawn through said plate from end to end between its edges nearest the rounded ends of the roll.

R. D. Q. 139. Do you or not find in said Exhibit Y an oscillating core plate weighted on one side of its pivots—that is to say, heavier on one side of its pivots than on the other?

(Objected to, as leading, and as assuming that which is not warranted by the language of the 5th claim of patent 357,993, and the statement in specification in line 81, page 1, which is "having one side of the core plate heavier than the other.")

A. I do.

190 Recross-examination:

Recross-question 140. You have been referred to the inclined position which the roll of paper assumes on Exhibit Y fixture. This inclined position appears to be in alignment with the movable arms of the fixture, and to continue in the same plane, which includes the plane of the arms; now is not this inclined position of the roll on Exhibit Y due to this inclined position of said arms? Will you testify that it is not?

Answer. It probably is due to the manner of its suspension on said arms and the contact of the upper end of the roll with the wall on which the fixture is hung.

R. C. Q. 141. Will not said roll operate just as well by permitting the roll and arms to hang vertically and away from the walls? This I show you by inclining forward the top of Exhibit Y, so that it would operate just as well in a vertical position and entirely removed from the wall.

A. The said roll on Exhibit Y, when held as stated in the question, is made to swing against the fixture in which the roll is suspended when sheets are torn therefrom, and said sheets can be so conveniently separated.

HENRY A. CHAPIN.

Subscribed and sworn to before me this first day of February, 1888.

ANDREW M. TODD,
[SEAL.] *Notary Public and Special Examiner.*

(Counsel for complainants here offers in evidence a certified copy from the records of the Patent Office in the matter of the interference entitled "Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks," and requests that the same be marked "Complainant's Exhibit No. 6, Interference Record Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks."

191 (Also a certified copy from the records of the Patent Office in the matter of the interference entitled Coffey *vs.* Hicks, and requests that the same be marked "Complainant's Exhibit No. 7, Interference Record, Coffee *vs.* Hicks."

(Defendants' counsel objects to Complainant's Exhibits 6 and 7 as immaterial.

(Counsel for complainants here desires it noted on the record that his *prima facie* case in each of the causes above entitled is now closed.)

UNITED STATES OF AMERICA,
Southern District of New York,
City and County of New York, } *ss:*

I, Andrew M. Todd, a notary public in and for said county, and special examiner in the foregoing-entitled causes of The Morgan Envelope Company, complainant, *vs.* William J. Morton, defendant, pending in the circuit court of the United States for the district of Massachusetts, and of The Morgan Envelope Company, complainant,

vs. The Albany Perforated Wrapping Paper Company and Seth Wheeler, defendants, pending in the circuit court of the United States for the northern district of New York, duly authorized and empowered to take such depositions and evidence as might be adduced by the complainant before me as notary public and special examiner as aforesaid, to be used in said causes, which depositions and evidence are hereto prefixed, do hereby certify that, on the 27th day of January, 1888, I was attended at my office, No. 261 Broadway, in said New York city, by counsel for the respective parties, and by Henry A. Chapin, a witness; that said witness, being of sound mind and lawful age, was by me first duly cautioned and sworn to testify the truth, the whole truth and nothing but the truth, relating to the matters for which his deposition was about to be taken, and was then carefully examined, and did thereupon depose, as appears by the foregoing deposition, which deposition was reduced
192 to typewriting, in the presence of said witness and under my supervision, by Robert H. Marshall, my clerk, and when completed was read over to him and signed by him, as and for his deposition, in my presence. I further certify that due notice of the taking of said deposition was given the opposing parties, as appears by the notice hereto prefixed, and that they attended by their counsel A. J. Todd, Esq. I further certify that I am not of counsel or attorney, nor connected by blood or marriage to either of the parties to said causes, nor in any way interested in the event thereof. I further certify that in taking of said deposition and evidence I have complied in all respects with the requirements of the 67th rule of the Supreme Court of the United States, as amended, and I herewith transmit said evidence and deposition, together with the depositions and evidence adduced in behalf of said complainants at Springfield, Massachusetts, also prefixed hereto, to Messrs. Church & Church, counsel for the complainant, pursuant to the stipulation between counsel.

In witness whereof, I have hereunto set my hand and affixed my seal, this 1st day of February, 1888.

ANDREW M. TODD,
[SEAL.] *Notary Public and Special Examiner.*

New York, February 1st, 1888.

Indorsed: Complainant's testimony. Filed Nov. 25, 1889. W. S. Doolittle, clerk.

193 United States Circuit Court, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER. } In Equity.

U. S. Circuit Court, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WM. J. MORTON. } In Equity.

NEW YORK, *August 22nd*, 1888.

Testimony in Rebuttal.

Present: Melville Church, Esq., of counsel for complainant; A. J. Todd, Esq., of counsel for the defendants.

Defendants' counsel reserves the right of examining one or more witnesses as to questions of fact, but not of an expert nature.

Complainant's counsel reserving the right to rebut same.

Deposition of Oliver H. Hicks.

Q. 1. What is your name, age, residence, and occupation?

A. My name is Oliver Hewlett Hicks; age, 39 years; residence, Chicago, Illinois; occupation, manufacturer of paper goods.

Q. 2. You are the inventor and patentee of the improve-
194 ments in packages of toilet paper, and of toilet-paper fixtures, shown, described and claimed in letters patent 325,410; No. 325,174 and No. 357,993, involved in this suit; are you not?

A. I am.

Q. 3. When was your attention first directed to the subject of improvements in toilet paper and fixtures, and what particularly led to the invention of the oval roll of toilet paper shown in your patent No. 325,410. You may state the circumstances under which the invention embodied in that roll was conceived and reduced to practice.

A. Some time in the year 1882 or 1883, I forget which, now, my business was quite small and I was desirous of adding something to it. My attention had been called from time to time to the waste and inconvenience attendant upon the use of the various styles of flat and roll paper then upon the market. I thought, upon reflection, the manner of putting up toilet paper could be improved upon, and set myself to work to accomplish that end. In the use of the ordinary flat packages of toilet paper, either wired or loose, great waste attended its use; as it was practically impossible, without great care on the part of the user, to detach at each operation the number of sheets necessary so as not to be wasteful; its use was also attended with a great deal of litter, more that the necessary sheets often being detached by the user, and the surplus being left to be scattered about; in public places, it was so easy to detach a large

quantity from the bunch or package, that much of it was carried away.

In the roll form of paper without perforation, there was no guide to positively determine the amount that should be withdrawn at one operation and keep within the limits of economy in its use. In the perforated roll of paper, although the web was divided or outlined by perforations into sheets to show the points at which it should be torn, it was difficult for the user to detach the proper amount for economical use, as the paper would often tear at places or points other than on the line of perforation. The roll, as gen-
erally used, was hung on a fixture upon which it revolved
195 easily, a pull upon the end of the paper, unless great care was used, was apt to reel off more paper than was necessary for economical use, the surplus not used being left around causing much litter. There was also litter attendant upon the use of the perforated paper, occasioned by its being imperfectly perforated; the portions intended to be removed to form the perforations often were not entirely so, and in the use of the paper would detach themselves from it, causing fine litter to fall upon the floor over which the paper was hung. This was especially objectionable in private houses whose bath-rooms were carpeted, as it is somewhat difficult to gather up these small particles of paper.

Having made a careful study of the deficiencies of the different kinds and forms of toilet paper then upon the market, I first turned my attention particularly to designing a holder for the flat packages of unwired toilet paper, that would overcome the objections that then existed against its use. I got up several such holders, one of which upon public trial and which I deemed the best of them, failed to give satisfaction. It was a square box in which the flat package was placed, provided with means for suspending it from the wall; the front of the box was partially opened, exposing a portion only of the sheet, all the edges of the bundle being covered by the front plate of the fixture. A back loose plate behind the paper, as fast as the paper was removed, pressed forward and kept the paper to the front. The manner of operating the fixture was intended to be that a single sheet should be removed at each operation by the user placing his hand or several fingers against the surface of the exposed sheet, and by a slight lateral movement removing it from the package.

In my experiments with this fixture, I had no difficulty in easily removing one sheet at a time. Upon placing the fixture on the market, it was found that all users were not so successful in its use, and were unable without great effort to remove a sheet at all; the
reason for this, I discovered to be that my hands were gen-
196 erally moist, causing the paper to slightly adhere to them; and those who failed to easily detach a sheet, had naturally dry hands. I was much chagrined at my lack of success, and made up my mind then and there that I would work at it until I produced something that would be a credit to me, and wipe out the stigma of my failure thus far. Upon going over the matter in mind, I came to the conclusion that the amount of paper that should be

withdrawn by the user, so as to come within the limits of economy, must be predetermined, and that it was desirable that the package or roll of paper itself, should be so constructed as to give to the user without instruction, and without care on his part, a piece of paper of economical length for use. The sheets of paper, at that time upon the market, in length varied, in the flat package of cut sheets, from six to seven inches; in width, from four to five inches. In the perforated paper, the sheets as outlined by the perforations, were from five and a half to six and a half inches in length. After the first device spoken of above, I made a number of fixtures, and put up paper in a variety of styles with a view of arriving at the object I was seeking, most of them were not, as I thought, of sufficient practicability.

In the year 1883 after having got up these various devices spoken of, I invented what is known to the trade and the public as the King toilet-paper package, this package in a high degree was acceptable to the public, met with large sales, is still popular and growing in public favor all the time. For use in public places it did not entirely meet the demands of the trade, the package was constructed of sheets cut to the proper size and so folded and formed into a bundle that upon one sheet being detached from it the end of the next one to it came into position to be grasped by the hand. Theoretically this bundle was economical in the highest degree and convenient, but unscrupulous persons using it in public places, such as hotels, public buildings, &c., would forcibly pull the bundle from its holder, or pull off a great number of sheets to carry away with them.

This, of course, required an effort on the part of the user, and
197 therefore, on this account, and the imperfections of the fixture, as first made and placed upon the market, showed me that I had not yet arrived at the perfection in a bundle of toilet paper, that I desired to.

In the year 1884, after producing many different styles of toilet paper, none of which—except those mentioned—were placed upon the market, and after summing up the good and weak points in my various devices, I came to the conclusion, upon careful reflection, that if toilet paper could be put up in the form of a roll, so that it would be self-measuring to the user, without effort on his part, or instruction, that it would be the most desirable form that could be made. Great complaint was at that time made of the perforated and plain rolls of paper on the market, but with the exception of the King paper, spoken of previously, they were the most desirable forms in which toilet paper was put up. The length of the ordinary sheet of toilet paper being from 5½ to 6½ inches, and even in some instances, 7 inches in length, it was obvious that to make a roll of toilet paper that would be self-measuring, and acceptable to the public, it should be constructed in such a manner that the sheets or pieces detached from it should approximate the length of one or two sheets of the paper then upon the market. In the use of toilet paper, it is the common practice to use at one operation at least two sheets of paper; the thinness of toilet paper makes it obvious why this is so. Paper of a thickness that would require but

one sheet, would be of a stiffness that would not meet the demands and necessities of the case, as toilet paper is used largely on account of its fineness of texture and softness. Thin paper of first quality is naturally soft and flexible.

My first step towards making a self-measuring roll was to take a flat, thin board, of about 6½ inches in width, and wind several convolutions of paper thereon, this produced an oval or flattened roll of paper with short rounded ends, which served as a guide to the point at which the paper should be separated from the roll and afforded a natural and convenient place for such separation without the necessity of special instructions to the user. It was
198 requisite that in putting a bundle of this description upon the market, that it should contain about the same amount of paper as the packages and rolls then in general use.

Upon winding further convolutions upon this board, of 6½ inches in width, and until the package contained the requisite amount of paper as before stated, I found that the outer convolutions were longer than would be acceptable to the public. I then considered how short it would be practicable to make the shortest sheet, and I reasoned in this way:

Each convolution should be of a length (the width being the average width of toilet paper) that when doubled it would cover the average hand. I took my own hand (being a medium-sized person) as being the average size, and made the shortest sheet so that when doubled, it would cover it. This made the length of the shortest convolution about 8½ inches. This length is produced by making the internal diameter of the band of paper about 2¾ inches. I found upon winding the requisite amount of paper upon a mandrel of this size, that it produced a bundle of paper that when flattened into oval shape, whose average convolution approximated the length of two sheets of toilet paper, as ordinarily put up.

The bundle thus produced was essentially different in its characteristics, from anything then upon the market, or even at present, unless made according to the specification of my patent, and the difference which will be apparent to any thinking person, consists in this:

Flatten my package, cut off the short rounded ends and you have a package of flat toilet paper, every sheet of which is practically large enough for use. Slit it at both ends, and the same result practically is obtained.

I found in experimenting with this roll—produced as hereinbefore described—that it was more convenient to separate one entire convolution at an operation, thus giving practically two sheets of toilet paper, than to separate half a convolution at each operation, though either could be conveniently done.

199 My oval roll of toilet paper, is to all essential purposes, a flat bundle of toilet paper, the ends of the sheets being connected by that portion of the paper which forms the rounded ends, which cannot be considered entirely as waste, as they form a tearing surface and outline; to the user the points at which the paper should be torn, and at one of which points it naturally tears when the user

pulls upon the free end of the paper. When one convolution is torn off at a time, the end of the paper at the next convolution, naturally falls so that it can be grasped by the hand for the next operation. Having invented and perfected a piece-measuring roll or band of paper, my next step was to make a fixture upon which it could be hung, that would lock it in in its position, thus preventing its being stolen, and as an aid to the user in severing the several convolutions as needed.

My first device was made from a piece of board which fitted the flattened opening of the roll, and which was held rigidly to the wall; my next device was to use a portion of the fixture on which perforated paper is hung, to which fixture I added a flattened core plate, the arms swinging in the fixture.

My next device was to use this same fixture, fasten the arms at right angles to the back plate of the fixture, and a pin on the core plate, which, when the paper was partially rotated, engaged one arm of the fixture, and stopped the complete revolution of the rod.

My next device was a similar fixture, in which I used a plate back of the roll, against which the roll abutted, serving as a stop and a cutter combined; from this, step by step, I arrived at the fixture placed upon the market, and known in this case as Exhibits C and X, by giving the roll an oscillating movement; the jar given the paper after tearing off a length, causes the free end of the next convolution to drop down in position to be grasped by the hand of the user in the next operation.

Adjourned to 2 o'clock, p. m.

200 NEW YORK, *Aug.* 22, 1888—2 o'clock p. m.

Met pursuant to adjournment.

Present: Counsel as before.

Q. 4. By what title did the fixture last referred to by you become known to the trade and the public?

A. The oval King fixture.

Q. 5. Will you state what degree of favor the oval King fixture and roll met with after you had begun to introduce them?

A. With very great favor. I would consider it unusual in the placing of any new device or article upon the market should it be received with more universal favor by the trade than was the oval paper and fixture and it is still increasing in popularity.

Q. 6. What if any difficulty have you had with rival claimants to the inventorship of the oval roll and fixture?

A. I have had some 3 or 4 interferences in the Patent Office with parties who desired me to share the advantages of my invention with them, and the result has been the defeat of all of them in their schemes.

Q. 7. Do you know Wm. J. Morton, the defendant in the Massachusetts case?

A. I do; known him some seven or eight years.

Q. 8. Mr. Morton when on the stand in this case testified that soon after you had placed the oval King fixture and paper upon

the market you were desirous of having him take an interest in them. Will you state what the negotiations were between you and Mr. Morton on this subject?

(Objected to as immaterial.)

A. Mr. Morton came into my office one day to make inquiries about toilet paper for a friend of his who was in business, as I remember now, in the country. While there I showed him my new fixtures as I was accustomed to all who came into my office. He became very much interested in them; said that he had several thousand dollars saved up, and sought to make an arrange-
201 ment with me to go into the business, saying he thought he might be able by borrowing money to increase the amount up to ten thousand dollars. I gave him respectful consideration, but did not encourage him in the idea that I would make any arrangement with him; told him to call again and I would think over the matter. I concluded that I did not want him, and finally told him to that effect; he seemed very much disappointed; tried to show me where it would be an advantage to have him. He sought me, not I him.

Q. 9. Did you ever attempt to protect yourself abroad in respect to the oval King fixture and oval roll; and, if so, with what success did you meet?

(Objected to as immaterial.)

A. I did attempt to patent it in several foreign countries, especially in England, but I found that Seth Wheeler had gotten in an application ahead of mine. I have since learned from the testimony in this case that the model, fixture, and paper which he sent there was either procured from me or made after a sample of the paper and fixture procured from me.

Q. 10. Were you or not successful in getting your English patent?

(Same objection.)

A. I was not.

Q. 11. Who were your contestants for priority in the U. S. Patent Office?

A. A party named Coffey was one, Johnson another, Seth Wheeler another.

Q. 12. At present, who in your opinion, furnishes to the trade and the public the bulk of the oval paper put up in accordance with your patent No. 325,410?

(Objected to as immaterial.)

A. I do not know to a certainty but I should say that the Albany Perforated Wrapping Paper Company furnishes a large proportion of it.

202 Q. 13. Have you any evidence to give as to how salable an article this oval-roll paper is regarded by the Albany company and its agents?

Same objection.

A. I know that they sell large quantities of it; from the time that I placed the paper on the market, at least three of the salesmen of the Chicago branch, while in their service, have endeavored to get into my employment, giving as a reason, that they thought that the oval paper was the best thing upon the market.

Q. 14. I now show you the small packages of paper, known as the "Pocket Companions," put in evidence by the def'ts, as Def'ts' Exhibit Small Rolls, No. 23, and ask you to state whether or not you recognize those packages as containing your invention in oval-roll paper; and if nay, state what qualities or characteristics of your inventions these rolls do not possess.

Objected to as incompetent, as calling upon the witness to draw a conclusion of law, which it is the office of the judge who hears this case to deal with.

A. I do not recognize them as embodying my invention, for the reason that they are not made according to the specifications of my patent, one convolution does not give a sheet which, when doubled, is practically large enough for use; neither is a single convolution large enough to be practicable for use. My specification particularly says that my roll is constructed or wound upon a mandrel, about $2\frac{3}{4}$ inches in diameter, which makes the length of the shortest convolution, about $8\frac{1}{2}$ inches in length, sufficient to be practical for use when doubled.

Q. 15. Do you think, that if you had had these "Pocket Companions" before you when you were struggling with the problem of how best to put up toilet paper in roll form, they would have been suggestive of your oval-roll package, which you finally did devise?

(Last objection continued, and as leading.)

203 A. As they do not embody my invention, it is not probable that they would have suggested any ideas to me.

Cross-examination.

A. J. TODD, Esq., of counsel for defendants.

X Q. 16. Have you one of the King toilet-paper packages, which you say you invented in the year 1883?

A. I have not one with me.

X Q. 17. Will you please furnish one hereafter, to be annexed to your deposition hereafter, as Exhibit Hicks King Toilet Package?

A. I will.

X Q. 18. When did you commence to sell this Exhibit King Toilet Package?

A. I think it was in the spring or summer of 1884.

X Q. 19. Was this the first package of toilet paper which you invented?

A. It was the first I put upon the market, but I do not think it was the first that I invented.

X Q. 20. What do you mean by your last answer; was not this the first package of toilet paper which you patented?

A. It was the first package of toilet paper which I patented.

X Q. 21. What package of toilet paper, if any, did you invent before this one, so patented, December 23d, 1884, application for which was filed November 8th, 1883?

A. I made several packages of toilet paper of different forms either before or about the time I invented the King toilet paper, it would be necessary for me to look up these several styles of paper which I invented, to ascertain definitely whether I made them after or before; I think I made several before.

X Q. 22. When did you invent the oval King toilet paper?

A. I believe it was in November, 1884.

X Q. 23. When did you apply for a patent on the oval
204 King toilet paper?

A. February 9th, 1885.

X Q. 24. How do you make that out, when the patent in suit, on the oval toilet paper, No. 325,410, states that the application was filed July 10, 1885?

A. The application of February 9th, 1885, contained both the paper and fixture, this was subsequently divided into several applications.

X Q. 25. How can you say it was subsequently divided into several applications, when the claim on the toilet-paper roll was not only rejected in the application of February 9th, 1885, but when you acquiesced in such rejection by cancelling such claim?

A. I did not acquiesce in any rejection, to my knowledge, but prosecuted my claims in the office through my attorneys, vigorously.

Def'ts' counsel here says that he will refer to the file-wrapper and contents of letters patent, No. 357,993 which was the application filed February 9th, 1885, (Def'ts' Exhibit No. 15) in support of the X Q. 25 and in disproof of the witness's answers to X Q. 23, 24, and 25.

X Q. 26. When did you make your first model of the oval King roll?

A. On or about November 27th, 1884.

X Q. 27. When did you get your patent granted on your oval King toilet paper referred to in the X Q. 23?

A. The patent was issued September 1st, 1885.

X Q. 28. You have stated in answer to direct question 11 that Coffey, Johnson and Seth Wheeler were your contestants for priority in the U. S. Patent Office. Do you mean to testify that an oval roll of paper was ever claimed in any application of Seth Wheeler's which was in interference with any of your applications?

A. As I remember now Seth Wheeler did not claim an oval roll alone.

205 X Q. 29. Explain what you mean by your last answer.

A. If I remember correctly his claim was for an oval roll in combination with a fixture, his specification showed an oval roll, I do not remember just what he claimed.

X Q. 30. Do you believe that the combination of an oval roll

with a fixture or with the fixture would be a patentable combination? I put you this question in view of your last answer.

A. I don't claim to be an expert in patent matters; my opinion is that it would be a patentable invention.

X Q. 31. And you think so, do you not, because you understand that the defendants in these suits sell oval rolls of toilet paper to parties who have bought from the complainant the oval King fixture?

A. That is not the reason I think so.

X Q. 32. Now is it not the fact that the issue in the interference case referred to in your answer to direct question No. 11 between yourself, Coffey, Johnson and Seth Wheeler was not "for an oval roll in combination with a fixture," but was as I understand from page 2 of the record of that interference case as follows:

"*Invention.*

A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity, and a stop for limiting the movement. Embraced in Hicks' first, second, third, and fifth claims, and in all of Coffey's claims."

A. It is my opinion and understanding that the interference between Coffey, Johnson, Seth Wheeler and myself was for an oval roll combined with a weighted core plate, which core plate I should consider as a portion of the fixture upon which the paper is to be mounted.

X Q. 33. Is not the function of the core plate to keep the roll extended in an oval shape the same as would be the case if the core were a cylinder instead of a plate, it would keep the roll extended in a round shape?

206 A. It is one of its functions.

X Q. 34. Without you distend a roll on a plate or a cylindrical core you cannot withdraw the paper from it on a fixture, can you?

A. It is better to have the roll distended on the core plate but it is not essential that it should be entirely distended after the roll is once compressed into a flat or oval shape, merely running a pin through the top of the fixture and suspending the roll on that pin enables the user to separate the paper at the proper points without any great inconvenience the paper can be suspended in various ways without loosing the advantage of its construction and purpose for which it was intended.

X Q. 35. Where did you apply for foreign patents on the oval-roll package of toilet paper, I am referring to the oval King package?

A. It is my impression now that applications for patents were made in Germany, France and England, certainly in England, but I cannot say positively as to the other two countries.

X Q. 36. Do you remember ever seeing a German patent on the oval King roll of toilet paper so taken out by you?

A. The Morgan Envelope Company of Springfield, Mass., had this matter in charge. I signed several applications for patents but besides this paid but little attention to it.

X Q. 37. Do you remember anything about a Canadian patent on the oval King package of toilet paper, or an application therefor?

A. I do not now remember that any application was made in Canada.

X Q. 38. Having reference to the Coffey interference in which Seth Wheeler, Johnson, Coffey and yourself were parties, is it not the fact that Mr. Wheeler did not file a preliminary statement therein and took no part in the litigation in that interference case?

207 A. I believe those are the facts.

X Q. 39. Where do you get the term you make use of in your answer to direct question 4, namely: "A self-measuring roll" as I do not find any such language in the specification of your oval-roll patent No. 325,410 here in suit?

A. My object in making this roll was to make it a piece-measuring roll. I don't remember when I used first, the exact terms of "self-measuring roll."

OLIVER H. HICKS.

Subscribed and sworn to before me this 22nd day of August, 1888.

[SEAL.] ANDREW M. TODD,
Notary Public and Spec. Ex'r, N. Y. Co.

UNITED STATES OF AMERICA,
Southern District of New York,
County and State of New York, } *ss:*

I, Andrew M. Todd, a notary public, in and for said county, and special examiner in the foregoing-entitled causes, of The Morgan Envelope Company, complainant, *vs.* The Albany Perforated Wrapping Paper Company, and Seth Wheeler, defendants, pending in the circuit court of the United States for the northern district of New York, and of The Morgan Envelope Company, complainant, *vs.* Wm. J. Morton, defendant, pending in the circuit court of the United States, for the district of Massachusetts, duly authorized and empowered to take such depositions and evidence as might be adduced by the complainant before me, as notary public and special examiner, as aforesaid, to be used in said causes which deposition and evidence is hereto prefixed, do hereby certify that, on the 22d day of August, 1888, I was attended at my office, No. 261 Broadway, New York city, by counsel for the respective parties, and by Oliver Hewlett Hicks, a witness; that said witness being of a sound

208 mind, and lawful age, was by me first duly cautioned and sworn to testify the truth, the whole truth, and nothing but the truth, relating to the matters for which his deposition was about to be taken, and was then carefully examined, and did thereupon depose, as appears by the foregoing deposition, which deposition

was reduced to writing by me, and when completed, was read over to him and signed by him, as, and for his deposition, in my presence.

I further certify, that due notice of the taking of said deposition, was given the opposing parties, and that they attended by their counsel, A. J. Todd, Esq.

I further certify, that I am not of counsel or attorney, nor connected by blood or marriage to either of the parties to said causes, nor in any way interested in the event thereof.

I further certify, that in the taking of said deposition and evidence, I have complied in all respects with the requirements of the 67th rule of the Supreme Court of the United States, as amended, and I herewith transmit said evidence and deposition to Messrs. Church & Church, counsel for the complainant, pursuant to the stipulation between counsel.

In witness whereof, I have hereunto set my hand and affixed my seal, this 23d day of August, 1888.

New York, August 23d, 1888.

[SEAL.] ANDREW M. TODD,
Notary Public and Special Ex'r, N. Y. Co.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

209 Circuit Court of the United States, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER. } In Equity. No. 5645.

Evidence for the Complainant.

Taken pursuant to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, by consent, before me, William O. Day, notary public and special examiner.

Present: Melville Church, Esq., of counsel for the complainant; A. J. Todd, Esq., of counsel for the defendants.

Deposition of Robert W. Day.

Direct examination by MELVILLE CHURCH, Esq., of counsel for complainant:

SPRINGFIELD, MASS., *Dec.* 27, 1888.

Interrogatory 1. State your name, age, residence and occupation.

Answer. Robert W. Day; 36; Springfield; treasurer of The Morgan Envelope Company, the complainant in these suits.

Q. 2. What are your duties as an officer of said company?

A. Besides the financial affairs, a general manager.

Q. 3. Seth Wheeler, a witness produced in behalf of the defendants, has testified that the oval King fixtures like Complainant's

Exhibit C, sold or used by him, or by the Albany Perforated Paper Company, were bought from the Hudson Valley Paper Company of Albany, N. Y., which company was understood to be the Albany agent of the complainant, The Morgan Envelope
210 Company. Will you please state whether or not the said Hudson Valley Company is or has ever been, the agent of the Morgan Envelope Company for the sale of such fixtures or paper or for any purpose whatever?

A. They are not and never have been.

Q. 4. Will you please state whether or not Carter, Rice & Co., of Boston, Mass., now is, or ever has been, the agent of the Morgan Envelope Company for the sale of the oval King fixture and paper, or either of them?

A. They are not and never have been.

Q. 5. Will you please state whether or not the Morgan Envelope Company now has or has ever had, any agents for the sale of their oval King fixtures or either of them? By this I mean, has it now or has it ever established an agent or agents for such purpose at any place outside of Springfield, Mass.?

A. We have salaried agents in New York city, Philadelphia, Baltimore and Providence, who solicit orders from the local trade.

Q. 6. What has been and is now the practice of the company, I mean the Morgan Envelope Co., in regard to the disposition of oval King fixtures?

A. To sell them only with the paper.

Q. 7. Has the Morgan Envelope Company sold any oval King fixtures to the Hudson Valley Paper Co., of Albany, N. Y., without paper?

A. We may have sent them fixtures and we did not send them paper, but they purchased from time to time the paper from us and understand that we do not supply fixtures unless they also order our paper.

Q. 8. Has or has not your company ever refused to sell fixtures without paper, when fixtures only were ordered?

A. We have.

Q. 9. State what your practice has been in this regard and whether such practice has been invariable.

211 A. To inform our customers that we could not supply fixtures unless paper was also ordered, and this has been our invariable custom.

Q. 10. How do the sales of the oval King fixtures and paper by your company during the past year compare with those during the preceding years?

A. Our sales have increased.

Q. 12. Can you state what your sales of oval King paper were during the year 1888?

A. I can tell how much we may have sold for the 11 months ending December 1st.

Q. 13. Please do so.

A. We have sold in the 11 months ending Dec. 1st, 3,353 cases of 100 packages each. On the basis of our sales for the month of

December, 1887, it would make our total sales for the 12 months of 1888 3,572 cases of 100 packages each.

Q. 14. Henry B. Richardson, a witness examined to-day in behalf of the defendants, testified that he had filed an application for a patent upon a toilet fixture and roll which was put in interference with the application of O. H. Hicks, the patentee of the oval King fixture and roll and that he has sold his application to the Morgan Envelope Company. Will you please state why this purchase was made of Mr. Richardson and what consideration was paid for his alleged invention?

A. After looking into the matter, we, under advice, thought it might be best to purchase it and we paid somewhere between $50 and $150 for it.

Q. 15. State how you regarded Mr. Richardson's claim to priority over Mr. Hicks.

(Objected to as incompetent and improper, as the witness has already been asked and stated the reasons for purchasing, and his conclusion upon the facts involved in an interference controversy as to priority or as to the legal status and its bearing on this case would be practically worthless as the witness is an interested party.)

212 A. We looked upon Mr. Richardson's invention as an abandoned experiment.

Q. 16. Why, then, did you purchase his interest?

A. Because we thought we could purchase it for less money than we could contest the matter.

Cross-examination by Mr. TODD:

X Q. 17. You however thought enough of Richardson's invention to purchase it?

A. We did purchase it.

X Q. 18. Is not Professor Richardson a poor man?

A. I don't know.

X Q. 19. Do you not know that he is not a rich man, a mere professor at Amherst college?

A. I do not know that he is not a rich man. I know he has testified to-day in my presence that he is a professor at Amherst college.

X Q. 20. You bought this invention, then, because you thought it would be cheaper than to have a contest with him? Is this not what you mean in your previous answers?

A. We purchased the invention through his counsel and paid the price fixed by the counsel, thinking it might otherwise fall into other hands and perhaps cost us more. Either to purchase it or possibly contest it.

X Q. 21. You also purchased it, did you not, thinking it would be cheaper than to have it go into a legal contest either through Richardson or others with the possibility of Hicks' claim being defeated?

A. We never thought that Richardson's claim would ever defeat that of Hicks, but as he asked only a small sum we bought it at

the price, thinking that was cheaper than to go into a legal contest over it.

X Q. 22. Do you think that a man who would take $50 for all his claims was either a rich man or would be apt to contest such a strong company as the complainant, your company?

213 A. I think a rich man could well afford to take $50 for Richardson's invention.

(Answer objected to as not responsive. Question repeated.) If his invention should have fallen into the hands of a person who had more money than Richardson he might have asked us more for it or it might have cost us more to contest it than we paid Richardson.

X Q. 23. Are you prepared to testify that you told Richardson that there was any weakness in his claim or that he would fail in getting a patent before you offered him the small sum of $50 for his rights?

A. We never had any conversation with Mr. Richardson in regard to his invention before we purchased it.

X Q. 24. When did you get an assignment of this invention?

—. ——.

X Q. 25. Who had all the negotiation with Mr. Richardson for the purchase of his right in the said application?

A. I think Mr. H. A. Chapin.

X Q. 26. Are you not positive as to this?

A. Mr. Chapin is the man with whom we transacted the business, and I suppose he acted for Richardson alone.

X Q. 27. Mr. Chapin was here to-day, was he not, the whole of the time that Mr. Richardson was being examined?

A. He was.

X Q. 28. Mr. Chapin is a patent solicitor in the city of Springfield where the complainant's place of business is located?

A. He is.

X Q. 28. If you paid $150 to Mr. Chapin, and Mr. Richardson got $50, as Mr. Richardson testifies, then Mr. Chapin must have been paid by the complainant for all of Mr. Chapin's services in applying for a patent for said Richardson. Is not this so?

(Objected to as calling for a mere inference and not evidence.)

214 A. It would look as if Mr. Chapin made $100 by the transaction.

X Q. 29. Is not Mr. Chapin sometimes employed by the complainant to make applications for patents?

A. I don't think he ever made an application for a patent for us.

X Q. 30. Are you positive as to this?

A. I can't now recall one that he ever made.

X Q. 31. Has he not been employed by the complainant in some kinds of patent business?

A. In this case he has acted as expert. We have sometimes gotten his opinion on patent matters.

X Q. 32. Will you please produce all the assignments or papers you have relating to the purchase of this Richardson patent?

A. I will.

(It is agreed between counsel that the title papers will be produced for inspection and copies will be annexed to the record.)

X Q. 33. Has not Carter, Rice & Co. the exclusive sale of all your oval King fixtures and toilet paper in the city of Boston?

A. They have not.

X Q. 34. Did they not have such exclusive sale at first?

A. They did not.

X Q. 35. How many firms there have the sale of such fixtures or paper?

A. We have sold the paper and fixtures in Boston, to any one who will purchase them.

X Q. 36. Is the last answer also true, with reference to the city of Albany, N. Y.?

A. It is.

X Q. 37. Didn't you give Carter, Rice & Co. of Boston, a better price on the paper or fixtures than any other dealer there; and
215 hasn't that corporation bought a larger quantity of the paper so as to entitle them to better prices and larger discounts, rebates, or whatever you may term them?

A. We gave Carter, Rice & Co. a lower price, because they purchased a larger quantity than others there, which would entitle them to a lower price.

X Q. 38. Was there an invariable rule, or is there, as to the supplying these oval King fixtures and paper, as to what quantity of fixtures are given to the dealers, with reference to the quantity of paper they purchased?

A. There has been no invariable rule as to the quantity of fixtures to be supplied with a given quantity of paper.

X Q. 39. What the complainant more cares about, then, is the sale of the oval King paper, rather than of the fixtures, is it not; and that the fixture is merely used to induce and increase sale of oval-roll paper?

A. It is.

X Q. 40. Have you any doubt that the oval King fixtures bought by the defendants from the Hudson Valley Paper Co., and Carter, Rice & Co., and on which are molded the complainant's name, were fixtures which had been made by the complainant and sold to those two corporations?

(Objected to as assuming and as calling for mere matter of opinion; not evidence.)

A. I have no doubt they were fixtures made by this company, and sold to those corporations.

X Q. 41. These parties whom you so sold oval King fixtures and paper to, you have testified they were not your agents, such as the Hudson Valley Paper Co., and Carter, Rice & Co. They were, however, were they not, your customers for those fixtures and paper?

A. They were customers, if a customer is a person or persons, who send us an order which we fill.

X Q. 42. And you sold them the said fixtures and paper outright, did you not; and the paper and fixtures were paid for in cash, or its equivalent?

216 A. We sold them the paper and fixtures when they purchased the paper with the fixtures and they have paid us cash or its equivalent, for such merchandise as has been sold from time to time.

X Q. 43. And they appear, do they not, by accounts on your books, and as customers by your books?

A. Yes.

Redirect examination:

R. D. Q. 44. State whether or not any sales by purchasers of fixtures and paper, of fixtures only, without paper, were authorized by your company, or made with its knowledge or consent.

(Objected to as immaterial.)

A. Such sales have never been made with our knowledge and consent.

ROBERT W. DAY.

Sworn to and subscribed, this twenty-seventh day of December, 1888.

[SEAL.] WILLIAM O. DAY,
Notary Public.

Stipulation.

It is hereby stipulated between counsel that proofs in this case are now closed, with the exception of the introduction of the Coffey defence and complainant's rebuttal thereto, and the introduction of certified copies of any, or all papers filed in the Richardson, Hicks and Johnson interference that the defendants wish to introduce, subject to all the objections as to competency, relevancy, or materiality of such copies.

Formal certificates to the depositions taken on both sides this 27th day of December, 1888, are hereby waived, and the custody of the originals of said depositions *are* given to counsel for the respective parties.

217 The foregoing certified by me this twenty-seventh day of December, 1888.

[SEAL.] WILLIAM O. DAY,
Notary Public.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

Circuit Court of the United States, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER.
} In Equity. No. 5645.

Circuit Court of the United States, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON.
} In Equity. No. —.

Testimony for the Complainant.

Taken in pursuance to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, by consent, before me, William O. Day, notary public and special examiner.

Present: Melville Church, of counsel for complainant; A. J. Todd, Esq., of counsel for the defendants.

Deposition of Charles C. Johnson, a Witness Produced and Sworn in Behalf of the Complainant.

Direct examination by MELVILLE CHURCH, of counsel for complainant:

SPRINGFIELD, MASS., *Feb.* 21, 1889.

Q. 1. State your name, age, residence and occupation.

218 A. Charles C. Johnson; Springfield, Vermont; age, 57; mechanic.

Q. 2. Are you the same Charles C. Johnson whose application for a patent, for an improvement in toilet-paper fixtures, was at one time involved in an interference in the Patent Office, with an application of Seth Wheeler of Albany, N. Y., and an application of Albert H. Hicks, of Chicago, Ill., for a similar invention?

A. I am.

Q. 3. Are you familiar with the construction and operation of what is known as the oval King toilet-paper fixtures, and if yea, state when and under what circumstances you received your first knowledge in regard to the same?

A. I am acquainted with it. The first one I saw was sent to me by H. W. Thompson, of Bellows Falls, Vermont.

Q. 4. Where was Mr. Thompson when he sent you that fixture and where were you at the date of its receipt?

A. I suppose Mr. Thompson was at his home, in Bellows Falls, and I was at my home, in Springfield, Vermont.

Q. 5. Have you any information as to where Mr. Thompson procured that fixture; if so, please state?

A. I understood from Mr. Thompson, that he got it from Mr. Hicks, of Chicago.

Q. 6. When was it that you received this oval King fixture from Mr. Thompson?

A. I think it was the latter part of April or first of May, 1885.

Q. 7. What instruction, if any, did you receive from Mr. Thompson, at the time he sent you that fixture?

A. Mr. Thompson sent me that fixture that I might see it and perhaps it might assist me in getting up some other holder.

Q. 8. Did you act upon Mr. Thompson's suggestion, and if yea, with what result?

A. I examined the fixtures; it set me thinking, which
219 resulted in bringing out one of oval shape, which hung eccentrically, and swung against a stop.

Q. 9. Do you know Albert A. Magwire, of Springfield, Vermont, a music teacher and dealer in musical instruments, and if so, how long have you known him?

A. I do; I have known him since 1878.

Q. 10. Mr. Magwire has testified for the defendants in this case, that he is acquainted with you; that on one occasion when he went to see you at Springfield, Vermont, you showed him a fixture that you had just got up, and that you asked him if he didn't think it was very simple, and that he told you that there was a fixture at the Windsor house, at Windsor, more simple than yours, and that you asked him to look at such fixture the next time he went to Windsor and see how the paper hung in the fixture; that in a few days from that interview with you, he examined the fixture, and that a few days later he informed you about his having done so. If you have any recollection of this interview with Mr. Magwire, you will please tell us about it, stating particularly what fixture you were working upon when Mr. Magwire came to see you.

A. I don't recollect definitely all the conversation, but he came into my work-room and I had just made an oval-roll fixture; in showing it to him, he says: "I think I have seen something similar at the Windsor house." I said I don't know, but if there is I should like to know about it. I should think it was the flat roll with the slitted edge, that I was at work upon.

Q. 11. State whether or not Mr. Magwire, at that interview, was able to describe to you the roll so that you understood it, the construction of the roll and fixture that he had said he had seen at the Windsor house?

A. He was not able to describe it so that I could understand it.

Q. 12. Will you state whether or not he described — you or
220 not, on any later occasion, the construction of the roll and fixture at the Windsor house, so that you understood it?

A. He said that it hung down flat, somehow, against the side of the house, but didn't give any description that I could understand.

Q. 13. State whether or not you took any steps to advise yourself as to the construction of the toilet-paper fixtures and rolls in use at the Windsor hotel at that time.

A. I did; soon after.

Q. 14. Please state what you did, giving all the circumstances, as near as you can recollect them.

A. I was at Bellows Falls soon after; I told Mr. Thompson what Mr. Magwire had said he had seen and it was thought best that I should go to Windsor to see it. I did go up there; I first visited the water-closet; I was unable to find anything but the ordinary perforated roll paper, in an ordinary old-fashioned fixture. While there, after I came out of the closet, I made inquiry of Mr. R. J. Coffey, the proprietor, as to what kind of fixture he had used; he said that he used the perforated roll, bought it by the box. I asked him if he had used, or had in use, an oval roll; he said he hadn't anything but the ordinary roll. I told him that I had understood from some party that he had an oval roll in use. He said that it might be possible, as the rolls came boxed, that they got flatte-d, and putting them onto the fixture with the plug out, that they would have that appearance, or the appearance of an oval roll.

Q. 15. How many water-closets in the Windsor house, did you visit at this time?

A. I should think it was four. I shouldn't be positive as to the number; I think that I visited three or four.

Q. 16. Will you please state when it was that Mr. Magwire came to see you, and spoke about there being a water-closet contrivance at the Windsor house, similar to the one that you were then at work on?

221 A. Well, I should think it was in the latter part of April, or the first part of May, 1885.

Q. 17. Was it before or after you had received the oval King fixture and roll, from Mr. Thompson?

A. It was after.

Q. 18. Are you positive of this?

A. I am. It was not very long after.

Q. 19. Did you take any steps to protect by patent, the invention that you were at work upon when Mr. Magwire came to see you as you have testified; and if yea, state what steps, and who, if any one, assisted you in the matter?

(Objected to as irrelevant and immaterial, because it is not in rebuttal of anything which Coffey did; and further, because no testimony, in chief, has been given by defendant, that Johnson was a prior inventor, or prior user. This objection to apply to testimony already given by this witness, and which may be given without further notice.)

A. I did; I applied for a patent, through J. N. McIntire. I had sold this patent to Mr. Thompson, or to Moore, Arms & Thompson, I don't recollect which.

Q. 20. State whether or not you ever learned that Mr. Robert J. Coffey had applied for a patent on an oval or flattened roll of paper, and a fixture for co-operation with it. And if yea, from whom, and when you first obtained such information?

(Objected to as immaterial, and hearsay.)

A. I did hear, from Mr. Thompson. I should think it was somewhere in the fall of 1885.

Q. 21. State whether or not you were called upon for the purpose of giving testimony in the interference case between Mr. Coffey and Mr. Hicks. If yea, in whose behalf, and whether or not you gave your testimony.

(Objected to as immaterial.)

A. I was called upon by Mr. Thompson, by telephone, from Windsor, and I went there. I did not testify.

222 Q. 22. When was this, and who did you see upon that occasion?

A. It was some time in the month of January, 1886; I saw Mr. Thompson and Mr. McIntire.

Q. 23. When did you arrive in Windsor, and when did you leave there?

A. I arrived there about 12 o'clock (midnight). And left there about seven or half past seven, next morning.

Q. 24. Will you please state what occurred on the occasion of this visit to Windsor, and why, if you know, your testimony was not taken? Give all the circumstances connected with that visit, that you can call to mind.

(Objected to as immaterial, and because it is traveling outside of the issues involved in this suit.)

A. When I arrived there I did not see Mr. Thompson; I registered and went to bed. Early in the morning—I should think about four o'clock—Mr. Thompson came to my room; we talked the matter over. I told him substantially what I have testified to here now. He requested me to come into Mr. McIntire's room, and I stated to him the same matter that I have here given. I told him that I was very busily engaged at home, and if they didn't wish to put me on the stand, I would like to return that morning. They said under the circumstances I might go, and I did return on the early train.

Q. 26. Mr. Magwire has testified that the interview which he had with you, in which he informed you about the paper and fixtures at the Windsor hotel, was in the spring of 1884. Was he or not right about the year in which that interview occurred?

A. I think he was not right.

(No cross-examination.)

CHARLES C. JOHNSON.

Sworn & subscribed before me, this twenty-first day of February, 1889.

[L. S.] WILLIAM O. DAY,
Notary Public.

223 OLIVER H. HICKS, another witness produced on behalf of the complainant, being duly sworn, deposes and says, in answer to interrogatories proposed by MELVILLE CHURCH, of counsel for complainant, as follows:

Q. 1. Are you the same Oliver H. Hicks who has been before examined in these cases?

A. I am.

Q. 2. Are you acquainted with or have you ever met Mr. H. W. Thompson of the firm of Moore, Arms & Thompson, of Bellows Falls, Vt.; if yea, state when and under what circumstances you first met him. Answer fully.

(Objected to as immaterial.)

A. I met Mr. Thompson in my office February 17, 1885, about the time that I first placed my oval paper and fixture upon the market. The morning of that day Mr. Hunt, of the firm of Fitch, Hunt & Co., paper dealers, came into my office, accompanied by a gentleman whom I had not met before. He said he wanted to see my new paper fixture, which he desired to show to his friend. The two examined it with great interest, and the gentleman, whom I afterwards learned was Mr. Thompson, remarked that it was the finest thing of the kind that ever was or ever would be. Mr. Hunt did not introduce me, which I thought strange and a short time after they left my office I went to the firm of W. D. Messenger & Co., thinking that they might tell me who the party was. They could not tell me with certainty, but I judged that it was Mr. Thompson, of Moore, Arms and Thompson, of Bellows Falls, Vt. During my absence from the office he called again, and as he seemed to take great interest in my fixture I determined to find out positively who he was, and went direct to the firm of Fitch, Hunt & Co., and asked them his name. They said it was Mr. Thompson, of the firm of Moore, Arms & Thompson, of Bellows Falls, Vt., and said that he remarked if I could protect it I had a good thing. When he
224 first called upon me in the morning I gave him a fixture and paper for the same. In the afternoon of the same day he called again when I asked him if his name was not Thompson, of the firm of Moore, Arms & Thompson, of Bellows Falls, Vt. He said that it was. He desired to get another fixture and paper for the same, which I gave him. His interest in my invention excited my suspicion, and I asked him what he had in view. His answer was somewhat evasive, saying possibly with a view to increasing the sale of his tissue paper.

Q. 3. Will you please state what kind of a fixture and roll you showed Mr. Thompson, and what kind of a fixture and roll you gave him at the time and place mentioned in your last answer?

A. I gave him an oval King fixture and a package of oval King paper.

Q. 4. Do you refer to the oval King fixture and oval paper, such as covered by your patents here in suit?

A. I do.

(Same objection.)

Q. 5. Your application for a patent on the oval King fixture, was first put into interference with the application of Seth Wheeler, of Albany, one of the defendants in this cause, and also with an application of Charles C. Johnson, of Springfield, Vt., was it not?

A. It was.

(Objected to as immaterial in this suit.)

Q. 6. And subsequently, said application was put into interference with the application of Robert J. Coffey, of Springfield, Vt., was it not?

(Same objection.)

A. It was.

Q. 7. State whether or not you ever saw the exhibit fixture
225 and roll, which Mr. Coffey put into evidence, in the interference case of Coffey *vs.* Hicks, as illustrative of the fixture and roll, which he testified had been used by him in his hotel—the Windsor hotel—at Windsor, Vt.?

A. My impression is that I have seen it, but I am not positive.

Q. 7½. State whether or not you have any recollection of the construction and operation of said Coffey fixture and roll, and if yea, please describe the same.

A. The Coffey fixture and roll was described to me by my counsel, and I also learned of its workings from his application for a patent, and I think I am perfectly familiar with it.

(Answer objected to by defendants' counsel as hearsay.)

Q. 8. Please state how you understood that Coffey fixture to operate.

(Objected to as based upon mere hearsay, and as being secondary evidence.)

A. My understanding of the Coffey fixture is that it was constructed from an ordinary fixture for holding perforated paper, leaving out the round wooden core and substituting a flat wooden strip. It was intended to use ordinary perforated paper, the roll being flattened and a thin piece of wood being used to keep it in its flattened or elongated shape, sufficient room, however, being left in the center opening to insert the pin for supporting it in the arm at one end of the center piece. The paper when suspended in the fixture was somewhat flattened in shape, and lay closely to the wall. If the free end of the paper hung outwardly from the wall a pull upon its free end gave the roll a partial revolution so that the lower end abutted against the frame of the fixture and wall. A pull upon the paper if the bundle was of full size, would result in a sheet of paper separating from the roll on the line of perforation. After
removing a portion of the paper, about one-fourth, unless the
226 paper was pulled sideways, the roll would make a complete revolution. When the roll was full, if given but a slight

pull, it would return to its normal position after separating a sheet, but unless care was taken the roll would wedge between the arms and the back piece of the fixture, and stay in its inverted position.

(Answer further objected to by defendants' counsel because it is based simply on the understanding of the witness, or in other words, conjecture and not upon facts in the knowledge of the witness.)

(No cross-examination.)

OLIVER HEWLETT HICKS.

Sworn and subscribed before me this twenty-first day of February, 1889.

[SEAL.] WILLIAM O'DAY,
Notary Public.

ROBERT W. DAY, another witness produced on behalf of the complainant, being duly sworn, deposes and says, in answer to interrogatories proposed by MELVILLE CHURCH, Esq., of counsel for complainant, as follows:

Q. 1. You are the same Robert W. Day who has been examined before in this cause, are you not?

A. I am.

Q. 2. Are you also the same Robert W. Day who on the 4th day of March, 1886, gave a deposition in behalf of Oliver H. Hicks in the matter of the interference entitled Coffey *vs.* Hicks, then pending before the United States Patent Office?

A. I am.

Q. 3. In that interference you were asked if you knew Mr. Thompson, of the firm of Moore, Arms & Thompson, of Bellows Falls, Vermont, and you replied that you did. You were also asked if you had any conversation with said Thompson, prior to the declaration of the interference, Coffey *vs.* Hicks, relative to the matter of toilet-paper fixture, and toilet paper therefor, and
227 you replied that you had had such conversation and proceeded to detail. I now ask you to please repeat the substance of the conversation that you had with Mr. Thompson as testified to by you in said interference, giving dates, as nearly as you can recollect them.

(Objected to as immaterial and as not in rebuttal, and as not tending to prove or disprove the material fact or issue in this case.)

A. Mr. Thompson called at the office of the Morgan Envelope Company some time about the last of February or the first of March, 1885, and said he had just returned from Chicago and had seen there a new style of toilet paper and a fixture for same, and he illustrated and described both to me. I next saw him in Bellows Falls, and he endeavored to show to me why it would be policy for our company to obtain for Moore, Arms & Thompson the license to manufacture the oval form of toilet paper. I saw him next about the middle of December of the same year, at the office of the Morgan Envelope Company, and he said he thought if I knew some

facts that he was possessed of, it would be best for us to obtain for his firm a license to manufacture the oval form of paper. Afterwards I saw him in January of 1886, when he said substantially what he had said in the two previous interviews in reference to our securing for his people a license.

Q. 4. State whether or not the Morgan Envelope Company, or Mr. Hicks, ever licensed Mr. Thompson or the firm of Moore, Arms & Thompson, under the oval King patents on the roll or fixture or either of them.

(Same objection.)

A. The Morgan Envelope Company never granted such a license, and I have no knowledge of Mr. Hicks having done so.

Q. 6. Was it before or after Mr. Thompson's first application for a license that the interferences between Mr. Hicks' application and others began to be declared by the Patent Office?

228 (Same objection.)

A. It was before.

Q. 7. The first interference involved an application of Hicks and the application of Mr. C. C. Johnson, which was assigned to the firm of Moore, Arms & Thompson, of which this Mr. Thompson, about whom you have been testifying was a member, did it not?

A. It did.

Q. 8. And the next interference involved the application of Mr. Hicks and the application of one Robert J. Coffey, which was also assigned to Mr. Thompson, of the firm of Moore, Arms & Thompson, did it not?

(Same objection.)

A. It did.

Q. 9. And the first interference also involved the application of Seth Wheeler, one of the defendants in this cause, did it not?

(Same objection and because the Seth Wheeler claims in that interference were confessedly for elements in the fixture for holding the paper.)

A. It did.

Q. 10. When Mr. Thompson suggested this matter of license did he or not make any reference to Mr. Seth Wheeler, of Albany, and if so, what did he say about him?

(Same objections continued and because the prior use set up and proved on part of the defendants was anterior to the facts and circumstances now inquired about.)

A. At the interview I had with Mr. Thompson, in Bellows Falls, he stated that he had seen Mr. Wheeler, and that he was in possession of some facts which he could not then state to me, but which he said would influence us in obtaining a license, if I knew the facts.

229 (No cross-examination.)

ROBERT W. DAY.

Sworn and subscribed before me this twenty-first day of February, 1889.

[SEAL.] WILLIAM O. DAY,
Notary Public.

Counsel for complainant here offers in evidence the entire printed record in the interference entitled Coffey *vs.* Hicks and requests that the same be marked Complainant's Exhibit Coffey-Hicks Interference Record.

(Objected to as immaterial, as the interference proceedings are no part of the issues in this case, and can possibly form no part of the rebuttal, particularly since the witnesses in that interference have been examined simply to the direct facts necessary to be proven in this suit.)

[SEAL.] WILLIAM O. DAY,
Notary Public.

February 21, 1889.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

230 COMPLAINANT'S EXHIBITS.

Complainant's Exhibit No. 6, Interference Record, Johnson vs. *Johnson*, vs. *Wheeler* vs. *Hicks. A. M. T., Spec. Examiner.*

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *September 4th*, 1885.

Seth Wheeler, care of A. J. Todd, 261 Broadway, N. Y. city, N. Y.

Please find below a copy of a communication from the examiner concerning your application for a fixture for holding a wrapping and toilet paper rolls, filed March 19, 1885, serial No. 159,392.

Very respectfully, BENTON J. HALL,
Commissioner of Patents.

231 Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the eighth day of October, 1885, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is a weighted core plate, or roll, adapted to be moved in one direction by a pull upon the paper mounted thereon, and in the opposite direction by a weight and a stop for limiting the movement.

The interfering applicants are: Oliver Hewlett Hicks, of Chicago, Ills., whose attorneys are Church & Church, of Washington, D. C.; Chas. C. Johnson, of Springfield, Vermont, whose attorney is J. N. McIntire, box 3506, N. Y. city, N. Y., and Chas. C. Johnson, whose attorney is Henry A. Chapin, of Springfield, Mass.

The issue is embraced in your third claim, Johnson's (McIntire,

attorney,) first claim, Johnson's (Chapin, attorney,) fifth claim, and Hicks' first, second and fifth claims.

The subject-matter of the issue is also involved in Hicks' third claim.

GALLATIN,
Acting Examiner.

I, Charles C. Johnson, of Springfield, Vermont, on oath, say that I am the inventor of a device for holding paper, which has been assigned by me to Moore, Arms & Thompson, of Bellows Falls, Vermont, and for which an application for letters patent was made to the Hon. Commissioner of Patents and filed June 6th, 1885, and numbered in the office of said Commissioner of Patents "Serial No. 167,875;" said device consisting of a weighted or pendant arm, adapted to be moved in one direction by a pull upon the paper hung thereon, and in the opposite direction by a weight and a stop for limiting the movement. I further say that said device was invented by me, and a practical machine made, in accordance
232 with said invention, on or about the fifteenth day of May, A. D. 1885, and that a portion of said device, to wit, the stop for limiting the movement, was invented by me on or about April 1st, 1884, and that said "stop" is embraced in letters patent issued to me, dated July 29th, 1884, and numbered 302,735, to which reference is respectfully had for particulars of description.

CHARLES C. JOHNSON.

STATE OF VERMONT, }
Windham County, } ss:

At Rockingham, in said county, on this fifth day of October, A. D. 1885, personally appeared Charles C. Johnson and made oath that the foregoing affidavit, by him subscribed, is true.

Before me—
[L. S.]

GEO. A. BROWN,
Notary Public.

Indorsed: Statement of Johnson. 167,875. Filed Oct. 8, 1885. Approved Oct. 14, 1885.

In the United States Patent Office, Before the Examiner of Interferences.

Seth Wheeler *vs.* Chas. E. Johnson *vs.* Chas. E. Johnson *vs.* Oliver H. Hicks. Interference. Apparatus for holding toilet paper.

Preliminary Statement of Oliver H. Hicks.

COUNTY OF COOK, }
State of Illinois. }

Oliver H. Hicks, of Chicago, in the county of Cook and State of Illinois, being duly sworn, deposes and says that he is the O. H. Hicks whose application is involved in the above-entitled interference; that he conceived the invention involved in said interference,

as set forth in the issue, on or about the twenty-seventh day of November, 1884; that he first explained it to others on or about the twenty-seventh day of November, 1884; that he first made drawings illustrating it on or about the seventeenth day of December, 1884; that he first made a model embodying it on or about the twenty-seventh day of November, 1884; that he first made a
233 full-sized apparatus for holding toilet paper, embodying it, on or about the twenty-seventh day of November, 1884; that since said last-mentioned date about 5,000 have been made, and that he has never abandoned it to the public.

OLIVER H. HICKS.

Subscribed and sworn to before me this third day of October, 1885.

[L. S.] MASON BROSS,
Notary Public.

Indorsed: Statement of Hicks. Filed Oct. 5, 1885. Approved Oct. 14, 1885. A. C. F.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *October 10th*, 1885.

SIR: It is respectfully requested that further action in the matter of the interferences declared September 14th, 1885, "Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks," be for the present suspended, that recent pending applications claiming the same subject-matter may be included therein.

D. B. GALLATIN, *Examiner.*

To the examiner of interferences.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *Oct.* 15, 1885.

In re interference, Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks. Before the examiner of interferences. Subject-matter, paper-holders.

Wheeler, one of the junior parties, having failed to file a statement within the time allowed for that purpose, judgment of priority of invention is hereby rendered against him in accordance with rules 107 and 111.

FRANK MACARTHUR,
Examiner of Interferences.

Limit of appeal, Nov. 3, '85.
Interference continued as Johnson *vs.* Hicks.

A. C. FOWLER,
Ass't Examiner.

Indorsed: 10214. Judgment against Wheeler, Oct. 15, 1885. Recorded vol. 18, p. 480.

234 DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *October* 15, 1885.

In re interference, Johnson *vs.* Johnson *vs.* Wheeler *vs.* Hicks. Before the examiner of interferences. Subject-matter, paper-holders.

Johnson (169,364), one of the junior parties, having failed to file a statement within the time allowed for that purpose, judgment of priority of invention is hereby rendered against him in accordance with rules 107 and 111.

FRANK MACARTHUR,
Examiner of Interferences.

Limit of appeal November 3, '85.

A. C. FOWLER,
Ass't Examiner.

Indorsed: 10214. Judgment against Johnson, Oct. 15, '85. Recorded vol. 18, p. 481.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *October* 15, 1885.

In re interference, Johnson *vs.* Hicks. Before the examiner of interferences. Paper-holders.

Chas. C. Johnson, care J. N. McIntire, box 3506 N. Y. city; O. H. Hicks, care Church & Church, present:

The statement filed by Johnson (167,875) apparently fails to overcome the *prima facie* case made by the respective dates of application. The parties are hereby notified that the interference will be decided upon the record as to Johnson in accordance with the provisions of rules 107 and 111, on Nov. 3, '85, unless before that time Johnson shall notify the other party and the office of his intention to contest the case upon the record as now made up, in which event the case will be set down for argument in accordance with said notice. For the purposes of rule 116 the statements have been approved.

FRANK MACARTHUR,
Examiner of Interferences.

Indorsed: 10214. Letters to both parties, Oct. 15, '85.

235 In the matter of the interference between the applications of Charles C. Johnson and Seth Wheeler and Oliver Hewlitt Hicks. Improvements in toilet-paper holders. Before the honorable Commissioner of Patents.

NEW YORK, *October* 29, 1885.

Messrs. Church & Church.

GENTLEMEN: In the matter of the above-entitled interference you will please take notice that, agreeably to the terms of official notice of October 15th, 1885, I intend to contest the case upon the record

as now made up, and have notified the Hon. Commissioner of Patents to this effect.

Respectfully, etc., CHARLES C. JOHNSON,
By attorney, J. N. McINTIRE.

In the matter of the interference between the application of Charles C. Johnson and Seth Wheeler and Oliver Hewlitt Hicks. Improvements in toilet-paper holders. Before the honorable Commissioner of Patents.

NEW YORK, *October* 29, 1885.

Hon. Comm'r of Patents.

SIR: In the matter of the above-entitled interference you will please take notice that I shall avail myself of the privilege to which I am entitled under rules 107 and 111; and I hereby give notice of my intention to contest the case upon the record as now made up, and according to which, as I understand your official letters of October 14th and October 15th, priority has already been awarded, as against Wheeler and Johnson (No. 169,364), and this notification to you, as well as the one to Hicks, is made in good season, your letter of October 15th fixing the limit within which such notice should be served as November 3, 1885.

Very respectfully, CHARLES C. JOHNSON,
By attorney, J. N. McINTIRE.

Indorsed: Notice by Johnson. $\frac{10214}{7}$. U. S. Patent Office. Oct. 30, 1885.

236 DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *October* 31*st*, 1885.

In re interference, Johnson *vs.* Hicks. Before the examiner of interferences. Subject-matter, paper-holders.

Chas. C. Johnson, care J. N. McIntire, box 3506, N. Y.; O. H. Hicks, care Church & Church, present:

Johnson has given notice of his intention to contest the case upon the record as now made up. The notice, however, fails to designate a day of hearing. The case is set down for hearing on Nov. 10, '85.

FRANK MACARTHUR,
Examiner of Interferences.

Indorsed: 10214[8]. H'g set for Nov. 10, '85. Oct. 31, '83.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *November* 16, 1885.

In re interference, Johnson *vs.* Hicks. Paper-holders. Before the examiner of interferences.

Pursuant to the order of October 13, 1885, this case is taken up for adjudication upon the record. Johnson having failed to over-

come the record date of Hicks, Hicks is hereby adjudged the prior inventor. Limit of appeal will expire December 7, 1885.

FRANK MACARTHUR,
Examiner of Interferences.

Indorsed: 10214[8]. Decision, Nov. 16, '85. Recorded, vol. 19, p. 63.

DEPARTMENT OF THE INTERIOR,
U. S. PATENT OFFICE,
WASHINGTON, D. C., *November 16th*, 1885.

In re interference, Johnson *vs.* Hicks. Paper-holders. Before the examiner of interferences.

Chas. C. Johnson, care J. N. McIntire, box 3506, N. Y city; O. H. Hicks, care Church & Church, present:

In the matter of the interference above referred to, upon which a hearing was appointed for the 10th day of November, 1885, the question of priority of invention has been decided in favor of O. H. Hicks. Limit of appeal Dec. 7, '85.

FRANK MACARTHUR,
Examiner of Interferences.

Indorsed: 10214[9]. Notice of decision, Nov. 16, '85.

237 NEW YORK, *November* 23, 1885.

In the matter of the interference, Johnson *vs.* Hicks. Before the examiner of interferences.

To the Hon. Commissioner of Patents.

SIR: In the matter of the above-entitled interference, in which you wrote me on the 16th inst. that the question of priority had been decided in favor of O. H. Hicks, without mentioning that there was any limited appeal, I have since learned that a limit was set for some day next month.

I have no intention of taking any appeal and hereby waive all right to the same, in order that all further procedure in the controversy may cease, and that Mr. Hicks' application may be disposed of *ex parte*.

Very respectfully, etc., C. C. JOHNSON,
By attorney, J. N. McINTIRE.

Indorsed: Johnson waives the right of appeal. Nov. 24, 1885. Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT No. 7.

Interference record, Coffey *vs.* Hicks. A. M. T., spec. examiner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *November 25th*, 1885.

(Mailed Nov. 25, 1885.)

Examiner of interferences:

An interference is found to exist between the following cases, and in respect to the invention therein specified, to wit:

Cases.

1. Oliver Hewlett Hicks, of Chicago, Illinois, for toilet-paper holder, filed February 9, 1885; ser. No. 155,464; whose attorneys are Church & Church, of Washington, D. C.

2. Robert J. Coffey, of Windsor, Vermont, for toilet-paper holder, filed November 10, 1885; ser. No. 182,336; whose attorney is J. N. McIntire, of New York city, N. Y.

238 *Invention.*

A weighted core plate or roll, adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity, and a stop for limiting the movement.

Embraced in Hicks' first, second, third and fifth claims, and in all of Coffey's claims.

WALTER F. ROGERS,
Act'g Exam.

Int. letter, dated Nov. 25, 1885.

U. S. PATENT OFFICE, *September* 24, 1886.

Before the examiners-in-chief on appeal. In the matter of the interference between the application of Robert J. Coffey, filed November 10, 1885, and the application of Oliver Hewlett Hicks, filed February 9, 1885. Improvement in toilet-paper holder.

Mr. J. M. McIntire for Coffey; Messrs. Church & Church for Hicks.

The matter in controversy is: "A weighted core plate, or roll, adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity, and a stop for limiting the movement."

Hicks filed application February 9, 1885.

He made the invention and reduced it to practice in November, 1884, and fully disclosed it in December.

He commenced manufacturing and putting on the market in

January and February, 1885, and during that year sold several thousand.

After coming to the office he was put in interference with two subsequent applications, one by one Wheeler, who failed to file a preliminary statement and went out of the case, and one by Johnson, whose preliminary statement failed to overcome Hicks' record date.

Johnson was assignor to Moore, Arms and Thompson, who are also assignees of Coffey, and the real contestants in this case.

239 Johnson, or rather his assignees, notified Hicks and the office of intention to contest, and on the day assigned for hearing, made default, and in place of contesting filed the application of Coffey. This was all well enough, provided Coffey was a genuine inventor and applicant, who had not abandoned or forfeited his invention.

But the circumstances are strongly suspicious as to the *bona fides* of his claims, and his proof should be clear and conclusive as to invention and perfection and complete reduction to practice, and diligence, in order to overcome the strong legal presumptions and equities in favor of Hicks.

Thompson, of the firm of Moore, Arms & Thompson, saw Hicks' device in February, 1885, as it was being manufactured, and was supplied with specimens of the fixtures, and declared himself highly satisfied.

He, therefore, knew all about Hicks' invention and his efforts and expenditures to give it to the public.

After the priority of Hicks over Wheeler and over Johnston had thus been established and made manifest, Thompson sought Coffey and induced him, by representing that he could secure a patent, and promising his assistance, to make the present application, which we see is in the interest of the firm with which Thompson is associated.

Now, what had Coffey done?

We must suppose that his own statement presents his case in its most favorable aspect.

He kept a hotel, and had four water-closets where roller toilet paper was used. In January, 1884, he received a box of this rolled paper, and noticed that the rolls had become flattened in packing, and noticed that when put on ordinary fixtures for cylindrical rolls the paper did not "roll off readily, as it did with a round roll," and so he put in a "flat stick, whittled out with a pocket knife." This, put in the core on one side of the shaft, upon which the roll was fixed for revolving, kept the roll spread elliptically, and he says, "I noticed that improved it, so that it tore off in short lengths instead of one continuous piece."

240 This paper was perforated and designed to tear at the line of perforations.

This experiment was made in May or June, 1884, and was tried only in one of the four closets, never having been considered so satisfactory that it was adopted and employed in the others, though he continued the use of this one with its stick from said May or June up to September, 1885, when all his old fixtures with perforated

rolls, except one, were thrown aside, and other fixtures with cutters and unperforated paper introduced in their place, and the one with the stick was cast aside with the rest and no vestige of it preserved.

He also says that he secured the same result in another closet by stuffing paper into the core of the roll.

Now, on cross-examination, on being asked why he did not use the flat-stick device on the other fixtures, he says: "That's the one I experimented with."

He was evidently correct in thus considering it merely experimental. It could not be considered a complete reduction to practice.

Though in looking back after Hicks' perfected invention and successful demonstration of the usefulness and practicability of a device having a "weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity and a stop for limiting the movement," we can see the idea in embryo in this rude experiment of Coffey, yet it really conveyed but a suggestion of what might be accomplished. It was not the invention as perfected and claimed.

Had Coffey gone on with due diligence and worked out the complete thing, and reduced it to actual practice, and presented the perfect device ready for the public to use, he might have gone back to this experiment to show his conception.

But he stopped right there, and threw aside what he had done,
and gave nothing to the public, and evidently had no thought
241 that he had made a patentable invention, or one that he had
any idea of patenting, until he was stirred up by Thompson and induced to make this application as aforesaid.

He says that he had no definite intention of filing an application for a patent when the new fixtures were put in the place of the old, or of again using the flattened roll and stick.

The testimony of other witnesses, produced to corroborate Coffey, is far from satisfactory as evidence of even a successful experiment.

But, such as it was, it must be considered as abandoned, and Hicks therefore appears to be the only real and original inventor of the device in contest, and we must affirm the decision of the examiner of interferences and award priority to Hicks.

R. L. B. CLARKE,
H. H. BATES,
Third member absent,
Examiners-in-Chief.

Indorsed: Decision. Filed Sept. 24, 1886. Subject-matter, toilet-paper rolls.

U. S. Patent Office.

Coffey *vs.* Hicks. Toilet-paper holder. Appeal from the examiners-in-chief.

Application No. 182,336 of R. J. Coffey, filed November 10, 1885.
Application No. 155,464 of O. H. Hicks, filed February 9, 1885.
Mr. J. N. McIntire for Coffey; Messrs. Church and Church for Hicks.

The matter in controversy is described as "a weighted core plate or roll, adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity and a stop for limiting the movement."

242 There is no doubt whatever that Hicks invented the device above described. The exhibit which he furnishes as a specimen of his manufacture is complete and perfect in all respects, and completely answers the description. I am equally clear that Coffey, whatever he may have invented, did not invent the thing described as the matter in issue in this interference. Coffey undoubtedly did invent or contrive a "roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity," perhaps; but he has certainly not shown that he invented a "weighted core plate," or invented or had in mind a "stop for limiting the movement."

I find no fault with the issue as it is declared. That is not the difficulty.

Coffey took upon himself the burden of proving that he invented the thing described as the subject of this interference. In my opinion he has simply failed to prove that he ever invented such a device. As said above, Coffey has no "stop;" he shows a roll of paper elliptically shaped, and because of its shape when its side is presented flatly to the wall to which it is fastened, its rotary motion or its revolution is impeded, and thereby the person using it is enabled by a skillful movement of the hand to tear off the paper without compelling another revolution, and in some instances to induce the roll to return by gravity. The roll, however, may revolve continuously; there is no stop to prevent it and nothing which was ever intended, or which will operate, as a stop.

I have listened attentively to all that has been said, and I have carefully examined and read the exhaustive briefs and arguments on the part of Coffey, and the more examination I have given it the more I am convinced that the device in controversy was not invented by Coffey, at all, but that the same was invented by Hicks, and that patent should issue to him alone.

January 19th, 1887.

M. V. MONTGOMERY,
Commissioner.

Indorsed: Commissioner's decision, dated Jan. 19, 1887. Recorded, vol. 33, page 78.

243 United States Patent Office.

Coffey *vs.* Hicks. Toilet-paper holder.

Application of Coffey filed November 10, 1885.
Application of Hicks filed February 9, 1885.
Mr. J. N. McIntire for Coffey; Messrs. Church & Church for Hicks.

The issue in controversy is defined as follows:

"A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity and a stop for limiting the movement."

Hicks, who lived in Chicago, conceived the invention and reduced it to practice in November, 1884. In December, 1884, he disclosed to W. H. Dyrenforth, a patent attorney in Chicago, and filed his application February 9, 1885.

Coffey, who kept a hotel at Windsor, Vermont, alleges conception of the invention in January, 1884. He received a consignment of toilet paper, some of the rolls of which were slightly flattened. Upon using these flattened rolls he discovered that they would not turn so freely, but would tend to stop at each half turn, and that less of the paper was reeled off and wasted. He thought that by flattening the roll more and mounting it eccentrically reeling would be prevented and short pieces of paper torn off. Coffey flattened the rolls and put a flat stick into one of the rolls, and put this up in one of his closets on trial. It was in use, it is claimed, down to September, 1885, when it was discarded and new fixtures substituted. This would in all probability have been the last of Coffey's efforts in the line of this invention had not a certain Thompson visited Hicks and seen his invention in Chicago in February, 1885. Thompson is a member of the firm of Moore, Arms & Thompson, tissue-paper manufacturers of Bellows Falls, Vermont. Thompson was very much pleased with Hicks' fixture, and took samples away with him. In June, 1885, one Johnson, assignor to Moore, Arms & Thompson, filed an application which was put in interference
244 with Hicks. Johnson's preliminary statement failed to overcome Hicks' record date, but through that interference Thompson became possessed of Hicks' sworn dates. It appears that Thompson learned of Coffey's crude device in use at the hotel at Windsor.

Coffey says that he first met Thompson in November, 1885, some weeks before he filed his application. Coffey's application was filed November 10, 1885, and is assigned to Moore, Arms & Thompson.

Coffey's roll with the flat stick in it was a crude affair. It was not so successful as to induce him to so construct his four or five other fixtures, and he finally discarded it as a failure. Even the skillfully made reproductions of it fail to operate successfully. He states that he never thought of applying for a patent on it (until, of course, after he met Thompson).

It is evident that the world is indebted for this invention to the independent exertions of Hicks, and that Coffey's earlier unsuc-

cessful efforts were revived by Thompson with full knowledge of Hicks' completed invention.

From Coffey's first conception of the invention until the filing of his application was nearly two years. Under these circumstances I have no hesitation in awarding priority to Hicks. Limit of appeal from this decision will expire June 17, 1886.

FRANK MACARTHUR,
Examiner of Interferences.

HARVEY S. DURNALL,
Assistant Examiner.

May 28, 1886.

Indorsed: Decision, May 28, '86. Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT AFFIDAVIT "K."

CITY, COUNTY, AND STATE OF NEW YORK, *ss:*

Seth Wheeler, being duly sworn according to law, deposes and says as follows: That he is a citizen of the United States and
245 a resident of the city of Albany, in the State of New York; that he is the person who communicated from abroad the invention to Henry Harris Lake, upon which an application was made No. 3136 of 1885.

Deponent further says that he did not obtain a knowledge of the said invention from Oliver Hewlett Hicks, of Chicago, or of any other person; that he obtained a knowledge of the invention by seeing it in public use in the United States; that he bought one of the fixtures and rolls in the city of Chicago, Ills., having previously seen them there and elsewhere on public sale; that he immediately transmitted the same to Henry Harris Lake, with request that he apply for British letters patent as a communication from abroad.

SETH WHEELER.

Sworn before me at her Britannic majesty's consulate general, New York, this 4th day of August, A. D. 1886.

W. R. HOARE,
H. B. M. Consul.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT "L."

Patents, Designs, and Trade-marks, October, 1883.

In the matter of the application of Henry Harris Lake, of the firm of Hazeltine, Lake & Co., patent agents, 45 Southampton buildings, in the county of Middlesex, for letters patent for an invention of improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper, and in the formation of the said webs or bundles—a communication to him from abroad by Seth Wheeler, of Albany, New York, United States of America, dated 10th March, 1885, No. 3136—and in the matter of the objection to the grant of the said patent by Oliver Hewlett Hicks.

I, Henry Harris Lake, of the firm of Hazeltine, Lake & Company, patent agents, 45 Southampton buildings, in the county of Middlesex, do hereby solemnly and sincerely declare as follows: That the invention described, illustrated and claimed in the specification accompanying my application, No. 3136, aforesaid, was communicated to me from abroad by Seth Wheeler, of Albany, New York, and that the instructions were received here in February, 1885, and
246 one of the apparatus, which is the subject-matter of the said application, was received here on the seventh day of March, 1885.

And I make the above solemn declaration, conscientiously believing the same to be true, and by virtue of the provisions of the statutory declaration act, 1885.

HENRY H. LAKE.

Declared at No. 10 Southampton building, in the county of Middlesex, the twenty-seventh day of August, 1886, before me, James Heather, a commissioner to administer oaths, in the supreme court of judicature in England.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT "M."

Notice to Purchasers of Toilet Paper.

Notice is hereby given to the trade, and to all buyers of toilet paper, that the undersigned are exclusive licensees under the patents of Oliver Hewlett Hicks, dated Sept. 1, 1885, Aug. 25, 1885, and January 26, 1886, for the manufacture and sale of oval-roll toilet paper and fixture therefor, and of the package of toilet paper known to the trade and by the public as the "King package," patented Dec. 24, 1884, and Oct. 27, 1885; and dealers are hereby warned against buying of unauthorized parties, and dealing in toilet paper put up in oval-roll form, and in packages in imitation of said patented articles, for upon receipt of information of such illegal purchase and sale legal proceedings will be commenced against infringers.

For the further information of purchasers we append copies of our labels.

"A" is a copy of the label on each roll of oval King toilet paper, printed on blue paper.

247 "B" is a copy of the label on each package of King toilet paper, printed on manilla paper.

Respectfully,

MORGAN ENVELOPE COMPANY,
Springfield, Mass.
CHICAGO MANILA PAPER WORKS,
Chicago, Ill.

June 1, 1886.

Indorsed: Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT O.

Seth Wheeler, pres. and treas. E. F. Wheeler, secretary.

Albany Perforated Wrapping Paper Co.

Perforated wrapping, toilet, waxed papers, anti-rust, carbolated, medicated.

1475 Broadway, New York.
72 Pearl street, Boston.
44 La Salle, Chicago.
Banner street, Golden Lane, E. C., } London.

2, 4, & 6 Hudson Ave., cor. Quay.

ALBANY, N. Y., ——, 188–.

GENTLEMEN: We are advised that the Morgan Envelope Co., of Springfield, Mass., and the Chicago Manilla Paper Works are intimidating our customers by threatening purchasers of certain styles of our goods with suits, alleging, without any sort of proof, that the same are infringements upon patents controlled by them. We would request that you give no attention to threats of this character other than to refer the makers to us and forward to us on receipt any communication of that nature you may receive from the parties aforesaid.

This is a form of warfare an honorable firm should not resort to. The fact that they do not take the open, manly course and bring suit against the manufacturers of the alleged infringement by which they can collect in one suit for all goods which they allege infringe their so-called rights, if they can prove their claims valid, shows they are conscious of the fallacy of their pretensions and
248 that their intention is simply to frighten buyers into purchasing of them. We are the original manufacturers of toilet and wrapping paper in roll form both plain and perforated. This is generally known the world over, and by none better than the parties to this attack upon us. Our customers may depend

upon our standing between them and harm in the sale or use of anything we manufacture. Our patents are of earlier date than those alleged to be infringed, we can therefore easily establish priority.

Truly yours, A. P. W. PAPER CO.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT "R," MORTON LETTER.

New England branch Albany Perforated Wrapping Paper Co., W. J. Morton, manager.

72 PEARL STREET, BOSTON, MASS., *July* 23, 1887.

Mr. E. V. Foster, Farren house, Turner's Falls, Mass.

DEAR SIR: If you will kindly favor us with your next order for toilet paper such as you are now using, oval King, will make you a special price of $9.00 per case. Kindly let us hear from you, and oblige,

Yours very truly, W. J. MORTON, *Manager.*

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

COMPLAINANT'S EXHIBIT "S," ZEIGLER LETTER.

Luzerne house, Geo. W. Zeigler, proprietor.

WILKES BARRE, PA., *April* 11, 1887.

M. E. Co.

GENTS: Please ship me one case of "oval King" toilet paper; nearly out.

We are offered this paper by the Albany P. Co. $9 per case of 100 packages, delivered. You should do the same. Answer.

Yours, etc., G. W. ZEIGLER.

Ans'd 12.

Indorsed: Filed Nov. 25, 1889. W. S. Doolittle, clerk.

250 EXHIBIT I.

A. D. 1885, 11th August. No. 9572.

Provisional Specification.

(Communicated from abroad by Seth Wheeler, of Albany, New York, United States of America, manufacturer.)

Improvements in Appliances for Holding or Containing Webs of Toilet or Wrapping Paper.

I, Henry Harris Lake, of the firm of Haseltine, Lake & Co., patent agents, Southampton buildings in the county of Middlesex, do hereby declare the nature of my invention for "improvements in appliances for holding or containing webs of toilet or wrapping paper" to be as follows:

This invention relates to appliances for holding or containing webs of toilet or wrapping paper in the form of bundles, and particularly to that class of appliances described in the specification filed with application for letters patent bearing date March 10 A. D. 1885 and numbered 3136.

The appliance described in the said former specification is intended for supporting a web of unperforated paper, and is provided with means whereby portions of limited length may be torn from the web as desired.

This invention has for its chief object to enable the appliance to be used with webs of perforated paper so that only a limited number of pieces can be torn from the web at any one time; and to this end it comprises improvements as hereinafter described.

251 In carrying the said invention into practice I provide a bracket having two projecting arms between which the bundle of paper is suspended.

In the ends of these arms is carried a spindle upon which the bundle of paper is supported. One end of this spindle is located in a recess in one of the said arms; the other end is split longitudinally and slightly expanded to form a kind of spring key, so that when the spindle is in position within a bundle of paper it cannot be removed from the bracket until the paper is removed, the said split end pressing against the sides of the hole through which the spindle is passed.

The web of paper, which is first preferably wound upon a cardboard core in the form of a hollow cylinder and then compressed to form a flat or oval bundle, is mounted upon the said spindle by means of two fork-shaped pieces, hereinafter termed forks. The prongs of these forks are at such a distance apart that they will only enter the hollow centre of the bundle when the latter is compressed. When these forks are inserted in the end of the bundle they maintain it in proper shape until the paper is used.

In the end pieces connecting the prongs of the said forks are

formed holes through which the spindle is adapted to pass when the bundle is placed in the bracket. These holes are formed nearer one end of each of the forks than the other end, in order that when the bundle is mounted in the bracket it will be heavier on one side of its axis than on the other, and so hang in a vertical, or nearly vertical, position, as described in the said former specification.

On the said end pieces are also formed stops which impinge against projections on the ends of the arms and prevent the complete rotation of the bundle when paper is being torn therefrom.

The operation of the improved appliance is similar to that described in the said former specification, except that the paper is not severed with a knife. When a piece of paper is to be torn from the web the end of the latter is grasped and pulled, thereby rotating the bundle until the stops on the end pieces impinge against the lower projections on the ends of the arms; by further pulling the
252 paper it will tear across the line of perforations which is nearest the then uppermost side of the bundle. When the piece has been removed, the bundle, by reason of its being heavier on one side of its axis than on the other, returns to its normal position, so that the end of the paper web is again placed in a convenient position to be grasped. The stops impinging against the upper sides of the arms prevent the bundle from rotating too far in a backward direction.

It is obvious that I may modify the construction before described without departing from the nature of my invention; for instance, instead of carrying the bundle upon two forks, a single plate passing quite through the same, or two plates one at each end, might be used. Also, instead of using a flat or oval bundle I may use one of square, triangular, or other suitable shape, the only modification necessary being in the form of the devices for supporting the bundle upon the spindle.

Dated this 11th day of August, 1885.

HASELTINE, LAKE & CO.,
For the Applicant.

253 *Complete Specification.*

Improvements in appliances for holding or containing webs of toilet or wrapping paper.

I, Henry Harris Lake, of the firm of Haseltine, Lake & Co., patent agents, Southampton buildings, in the county of Middlesex, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

This invention relates to appliances for holding or containing webs or strips of toilet or wrapping paper in the form of bundles, and chiefly to that class of such appliances wherein flat or oval coils, rolls or bundles of paper are used, as described in the specification of former letters patent dated March 10th, A. D. 1885, N. 3136.

In the said former specification, I have more particularly described an appliance adapted for use with a web of unperforated paper, and provided with means for facilitating the tearing or separation of pieces of convenient length from the said web.

The chief object of the present invention is to provide an appliance or holder which is adapted for use with webs of paper divided into lengths or pieces of convenient size by transverse rows of perforations, and which is provided with means for preventing the unwinding of more than a limited number of the said lengths or pieces from the said web at one operation.

In the appliances heretofore generally used for holding strips or webs of paper perforated as above described, no means have been provided to limit the rotation of the roll after a certain number of lengths have been unwound therefrom, so that frequently a
254 much greater quantity of paper is unrolled than is required for use, the result being that the paper is sometimes wasted. But, by my present invention, the rotation of the bundle is limited and waste from the above-named cause is, therefore, avoided.

In the accompanying drawing,

(Here follows diagram marked p. 249.)

Figure 1 is a front elevation of an appliance constructed according to my present invention.

Figure 2 is a side elevation of the said appliance.

Similar letters of reference indicate like parts in these two figures.

a is a bracket having two projecting arms b, b^1. *c* is the bundle of paper, which is suspended or supported between the arms b, b^1 upon a spindle *d* carried by the said arms. This spindle is screw-threaded at one end and is provided at its other end with a head d^1. It is passed through the arm b^1 and through the bundle *c* and is screwed into the arm b.

The web of paper, which is first preferably wound upon a core to form a flat or oval bundle, as described in the said former specification, but which may, if desired, be wound to form a circular bundle

which can be flattened when required, is mounted upon the said spindle by means of two forked pieces e. The prongs e^1, e^2 of these pieces e are at such a distance apart that they will only enter the central hole or cavity of the bundle when the latter is flat. When these forked pieces are inserted in the ends of the bundle, they maintain it in its proper shape.

In the bosses e^3 of the forked pieces e are formed holes, through which the spindle d is passed, as shown. These holes are formed nearer to the prongs e^1 than to the prongs e^2, so that the bundle, when mounted in the bracket, will be heavier on one side of its axis than on the other side thereof, and will therefore hang in a vertical or nearly vertical position, as shown in figure 2.

f, f are stops or studs formed or fixed on the said forked pieces e. In the normal position of the bundle, these stops bear against projections g on the arms b, b^1. When the bundle has been rotated through a certain angle by pulling the end of the strip or web of paper to remove a piece or length therefrom, the said stops impinge against projections g^1 on the said arms and prevent further rotation of the bundle.

The operation of the improved appliance is somewhat similar to that described in the said former specification, but the paper is not severed by means of a knife. When a piece of paper is to be torn from the web, the end of the latter is grasped and pulled, thereby rotating the bundle until the stops f impinge against the projections g^1 on the arms b b^1, as shown by dotted lines in figure 2. By further pulling the paper, it will be torn across the line of perforations which is nearest the then uppermost side of the bundle. When the piece has been removed, the bundle, by reason of its being heavier on one side of its axis than on the other side thereof, returns to its normal position so that the end of the paper web is again placed in a convenient position to be grasped by the hand for the purpose of tearing another piece from the said web.

It is obvious that I may modify the construction above described without departing from the nature of my invention; for instance, instead of employing two forked pieces carrying the bundle, I may use a single plate extending from end to end of the same. Moreover, instead of using a flat or oval bundle, I may use one of square, triangular or other suitable shape, the form of the devices e for supporting the bundle upon the spindle being modified accordingly.

I sometimes construct and arrange the spindle d as follows, that is to say, one end of this spindle is located in a recess in the arm b, and the other end is split longitudinally and slightly expanded to form a kind of spring key, so that, when the spindle is in position, the said split end presses against the sides of the hole in the arm b^1 through which the spindle is passed, and prevents the same from dropping out of position.

Moreover I sometimes modify the construction and arrangement of the stops.

By arranging the stops at the ends of the bundle as above described, instead of employing a stop so arranged that the

256 paper will come in contact therewith, I provide for avoiding the tearing of the paper except through a line of perforations.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed as communicated to me by my foreign correspondent I declare that what I claim is:

The improved appliance for holding a web or strip of paper in the form of a bundle, which appliance is provided with the stops for limiting the rotation of the said bundle, substantially as, and for the purpose, set forth.

Dated this 11th day of May, 1886.

HASELTINE, LAKE & CO.,
Agents for the Applicant.

258 EXHIBIT J.

A. D. 1885, 10th March. No. 3136.

Provisional Specification.

(Communicated from abroad by Seth Wheeler, of Albany, New York, United States of America, manufacturer.)

Improvements in Appliances for Holding or Containing Webs or Bundles of Toilet or Wrapping Paper and in the Formation of the said Webs or Bundles.

I, Henry Harris Lake of the firm of Haseltine, Lake & Co. patent agents, Southampton buildings in the county of Middlesex do hereby declare the nature of said invention for "improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper and in the formation of the said webs or bundles" to be as follows:

This invention relates to appliances for holding or containing webs or bundles of unperforated paper to be used for toilet purposes or for wrapping up articles, and to the formation of the said webs or bundles.

The chief object of the said invention is to enable pieces of unperforated paper of limited size or length to be readily removed or torn from the web or bundle.

In carrying the said invention into practice I provide a suitable bracket adapted to be secured to a wall or the like. This bracket consists of a back plate from which extend two arms for car-
259 rying the web or bundle of paper. Between these arms is a bar or plate the outer edge of which is provided with a number of teeth similar to those of a saw.

Between the arms of the bracket is pivoted a plate of metal for carrying the paper, the breadth of which plate is such as to prevent the said plate from turning completely round. One of the pivots which supports the said plate is movable so that when the bundle of paper is used the said plate may be removed to allow another

bundle to be placed thereon. The said pivot cannot be entirely removed from the bracket, being provided on its outer end with a knob for preventing it from slipping into the bundle of paper, and on its inner end with a hook or bend, so that when inserted into a socket in the plate adapted to receive it it will turn partially round and cannot be again brought into position to pass through the said socket until the paper is entirely removed from the plate and the said end thus exposed to view.

The paper is preferably wound on a flat card-board core of the same breadth as the plate, so that the bundle of paper wrapped around the same is flat also.

When a bundle of paper is to be placed in the bracket the plate is removed by withdrawing the movable pivot from its socket and the said plate is slipped within the card-board core, the plate is then placed between the arms, and the pivot again inserted into the socket.

When the bracket is fixed in position the web or bundle of paper hangs in a vertical or slightly inclined position upon its horizontal axis. When a piece of paper is to be torn off the bundle or web, the end thereof is grasped by the hand and drawn down, causing the plate to oscillate upon its pivot and bring the bundle of paper into contact with the serrated edge, by continuing to pull the paper it will tear off along the line of the said serrations. The pieces of paper torn off are of the same length as the circumference of the bundle.

Dated this 10th day of March, 1885.

HASELTINE, LAKE & CO.,
For the Applicant.

260 *Complete Specification.*

Improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper and in the formation of the said webs or bundles.

I, Henry Harris Lake, of the firm of Haseltine, Lake & Co., patent agents, Southampton buildings, in the county of Middlesex, do hereby declare the nature of my invention for "improvements in appliances for holding or containing webs or bundles of toilet or wrapping paper and in the formation of the said webs or bundles" and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

This invention relates to apparatus or appliances for holding or containing webs, strips or bundles of paper, for toilet or wrapping purposes; and to the formation of the said bundles.

The chief object of the said invention is to provide for the tearing and separation of pieces of paper of convenient size from a web, in the form of a bundle, without perforating the same at regular intervals to facilitate the separation.

The said apparatus comprises means whereby a bundle of paper, after it has been rotated for a certain distance by pulling the end of the strip or web, will be automatically arrested, so that the continued pulling will cause a piece of the paper to be severed from the strip or bundle.

The said invention also comprises a paper bundle which is specially applicable for use with the said apparatus.

In the accompanying drawing—

(Here follows diagram marked p. 257.)

261 Figure 1 is a plan of a bracket having a bundle or strip of paper arranged therein according to this invention.

Figure 2 is an end view of the same, and

Figure 3 is a section on the line *x x*, figure 1, showing the bundle in the reverse position to that shown in figure 1.

Figure 4 is a rear view of the paper-carrying plate hereinafter described.

Figure 5 is an end view illustrating a modification of the said invention.

Like letters of reference indicate the same parts throughout the drawing.

A indicates a bracket for holding the strip, web or bundle of paper, and adapted to be secured to a wall or other support. This bracket has a back plate *a*, from which extend two arms *b*, b^1, between which the coiled strip or bundle *c* of paper is carried in the manner hereinafter described.

Upon the plate *a*, between the arms *b*, b^1, is a bar or blade *d*, the outer edge of which is preferably provided with a number of teeth or serrations somewhat similar to those of a saw. The said back

plate, arms, and blade are preferably cast in one piece, but, if desired, the arms may be rivetted or otherwise suitably attached to the back plate, and the serrated bar may be secured to, and between, the said arms.

Between the arms b, b^1 is a metal plate e, figures 2 and 4. This plate is pivotted in the outer ends of the said arms and serves as a core for carrying the paper bundle. The said plate is so arranged relatively to the blade d that it can only make half a revolution upon its axis, that is to say, its further movement will be prevented by the impingement of its edges against the blade d. The plate e is not evenly balanced upon its pivots, the latter being arranged at one side of its centre of gravity, so that the said plate normally occupies an inclined position with its upper portion projecting forwardly as shown in figure 2. The portion of the plate d below its axis is heavier than the portion above the same, in order that the said plate shall return to its normal position, after it has been
262 partially rotated as hereinafter described. For this purpose the upper portion of the said plate may have holes e^1 formed therein, as shown in figure 4, to diminish its weight.

Instead, however, for constructing the plate e in this manner, it may be provided with a spring e^2 adapted to be compressed against the arm b when the bundle is oscillated, and to throw the said bundle back to its normal position when the piece of paper is severed therefrom.

One pivot f of the plate e is integral therewith and is fitted to turn in a bearing in the arm b^1 of the bracket. The other pivot g, which has its bearing in the arm b, is movable, so that, when the coiled strip or bundle of paper is exhausted, the said plate may be removed to allow another coiled strip or bundle to be placed thereon. The pivot g is fitted to slide in the aperture or bearing in the arm b; it cannot be entirely removed from the bracket, being provided, on its outer end, with a knob or enlargement h, and, on its inner end, with a hook or bend i. This pivot is adapted to be inserted into the socket j of the plate e, the hole through which socket, in cross-section, is longer in one direction than in the other, as shown in dotted lines in figure 2, so that the hook can only pass through the said socket in one position. When the hook projects through the end of the socket, it is turned partially around and will then prevent the return of the said hook into such a position as would allow it to pass through the said socket, until the paper is entirely removed from the plate and the said hook is exposed to view, and until the hook has been properly adjusted.

The paper is used with this apparatus in the form of an approximately flat or oval coil, roll or bundle, which must be large enough to receive within it the plate e as shewn in figures 2 and 3.

When a coil or bundle of paper is to be placed in the bracket, the plate e is removed, the movable pivot g being withdrawn from its socket j as above described, and the plate d is slipped within the coil or bundle. The plate, with the coil or bundle thereon,
263 is then placed between the arms b b^1, the pivot f is inserted

into its bearing in the arm b^1, and the pivot g into the socket j in the plate e.

When the bracket is fixed in its proper position, the web, coil or bundle of paper hangs in a vertical or inclined position upon its horizontal axis, as shown in figure 2. If it is desired to tear a piece of paper from the web, the free end of the latter is grasped by the hand and pulled, the plate e and the paper are thereby caused to turn upon the pivots f g, until the paper comes in contact with the serrated edge of the blade d, as shown in figure 3, which edge serves as a stop. By continuing to pull the paper it will be torn off at x against the serrated blade. When a piece of paper has been thus torn off, the plate e, by reason of the excess of weight upon one side of the axis, or the reaction of the spring e^2, returns to the position show- in figure 2. The free end of the strip or web of paper at the point x is then brought to the position shown at y, figure 2, so that it can be readily grasped to tear off another piece of paper without the necessity of turning the paper around to find the end, as is frequently the case with other devices of this class. When the bundle is returning to its normal position after the severance of a piece of paper, its impetus will cause the lower portion thereof to strike the lower edge of the blade d. The jar caused by this blow will have the effect of facilitating the fall of the end of the strip or web into the position shewn at y.

If it is desired to employ a round coil or roll instead of a flat bundle, I modify the apparatus as shewn in figure 5. In this case, as the core upon which the web or strip is wound or coiled is cylindrical, I attach thereto a counter-balance k, which turns the roll back to its former position after a piece of paper has been torn therefrom. In order to prevent the complete rotation of the roll, this counter-balance is arranged to impinge at one end, when the roll is rotated, against a stop l on the arm b, as shewn in dotted lines.

The operation of this modified form of my apparatus is substantially the same as that of the apparatus first herein described, that is to say, the free end of the paper is pulled and the roll or
264 bundle is rotated until arrested by the stop, the continued pulling then severs a piece of paper against the blade d. After the piece is severed, the counter-balance returns the roll to its normal position, and the free end of the paper falls into a position in which it can be conveniently grasped when required.

In both of the forms or modifications above described, the pieces of paper torn off are of the same length as the circumference of the bundle at the time of tearing them off, and they will vary only slightly in length as the circumference of the bundle diminishes with the consumption of the paper.

By thus regulating the length of the pieces of paper, the waste of paper which takes place when it is drawn from a roll in the ordinary manner is avoided.

The bundle of paper is preferably made by winding or coiling a strip or web of paper upon a core of any suitable material, such as wood or pasteboard, and forming a permanent part of the finished coil. This core is nearly or approximately flat or oval in cross-sec-

tion, but, in all cases, its greatest diameter should be equal to, or greater than, twice the thickness of the superposed layers of the coil of paper wound thereon. The said core is made hollow to receive the plate as hereinbefore described, or, if made solid, it is provided with an opening adapted to receive a rod or other support, by which the core or bundle will be held or supported in place in the bracket. This opening is, preferably, upon one side of the centre of the core, so that the bundle will hang in substantially the position hereinbefore described.

Instead of forming the bearing of the bundle support in the manner set forth, I sometimes form indentations in the end of the core piece, at suitable points relatively to the axial line, the said indentations receiving the supporting journals or pivots of the brackets.

I sometimes substitute, for the wooden or pasteboard core, a core made by pasting together several thicknesses of suitable paper, or even several of the initial folds of the paper strip or web
265 itself. Or the core may be formed by simply doubling a strip of paper or card-board upon itself, and inserting it within the package.

If the core is composed of solid material, the paper may be tightly wound thereon; but if the core is formed of material more or less yielding, the roll may be compressed into oval form before or after the core is inserted. In the one case, the core gives the bundle the oval or flattened form, and, in the other, it maintains the bundle in form after it has been flattened.

It is obvious that I may modify the construction of the apparatus hereinbefore described without departing from the nature of my invention, for instance, the bracket may be provided with arms adapted to spring laterally and having at their outer ends pivots or bearings for supporting the oscillating plate or core carrying the bundle of paper. With this construction it is only necessary to spring the arms apart in order to place a bundle of paper in the bracket.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed as communicated to me by my foreign correspondent I declare that what I claim is

First. An apparatus or appliance for holding or containing a strip or web of paper in the form of a bundle, in combination with means for limiting the extent of rotation of the said bundle, so that only pieces of limited length can be unwound and removed therefrom.

Second. The pivotted plate carrying the paper in the form of a flat or nearly flat bundle, so arranged that it will hang in an inclined position, in combination with a bar which serves for limiting the movement of the said plate and as a cutter for severing the pieces of paper, substantially as described.

Third. The modification of my invention wherein the paper, in the form of a roll or cylinder, is coiled upon a centre piece or core which is pivotted in arms or brackets, in combination with a stop for limiting the movement of the said paper, a blade or cutter, and a counter-balance, substantially as, and for the purposes, set forth.

Fourth. A bundle of paper consisting of a continuous strip
266 or web wound or coiled into an approximately flat or oval form, and maintained in such form by a permanent central core adapted if desired to receive the bearings on which the bundle revolves, substantially as described.

Fifth. A bundle of paper for toilet or other purposes, consisting of a continuous strip or web wound or coiled into an approximately flat or oval form so that its longest internal diameter is equal to, or greater than, twice the thickness of the superposed layers of paper, and having a core forming a permanent portion thereof, substantially as described.

Dated this 10th day of December, 1885.

HAZELTINE, LAKE & CO.,
For the Applicant.

267 *Defendants' Testimony.*

United States Circuit Court, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER CO. and SETH WHEELER. } In Equity.

SAME
vs.
WILLIAM J. MORGAN. } In Equity.

Testimony on behalf of the above-named defendants, taken, pursuant to the 67th rule of the Supreme Court of the United States, in equity, as amended, according to the notices annexed, before me, Andrew M. Todd, notary public and special exam'r.

NEW YORK, *March* 27, 1888.

Present: A. J. Todd, Esq., sol'r and of counsel for def'ts; Melville Church, Esq., of counsel for complainant.

WILLIAM J. MORTON, being produced and duly sworn, in answer to interrogatories propounded to him by A. J. TODD, Esq., says as follows:

Q. 1. Are you the same William J. Morton who has already testified in this case on the part of the complainant?

268 A. I am.

Q. 2. Where did the fixtures like Complainant's Exhibit "C" fixture which you either sold or gave away come from?

A. They were bought of Carter, Rice & Co., Boston, Mass.

Q. 3. Who are Carter, Rice & Co.?

A. Sole agents for the Morgan Envelope Co. for the sale of oval King fixtures and paper.

No cross-examination.

WILLIAM J. MORTON.

Subscribed and sworn to before me this 27th day of March, 1888.

ANDREW M. TODD,

[SEAL.] *Notary Public, N. Y. Co., Special Examiner.*

Counsel for defendants offers in evidence five rolls of paper as follows:

Roll of paper introduced in X Q. 89, Chapin deposition, page 136, complainant's record, which is marked Defendants' Exhibit No. 1.

Roll of paper introduced in X — 93, Chapin deposition, page 139, complainant's record, which is marked Defendants' Exhibit No. 2.

Roll of paper introduced in X Q. 100, Chapin deposition, page 142, complainant's record, which is marked Defendants' Exhibit No. 3.

Roll of paper introduced in X Q. 101, Chapin deposition, page 143, complainant's record, which is marked Defendants' Exhibit No. 4.

269 Roll of paper introduced in X Q. 102, Chapin deposition, page 144, complainant's record, which is marked Defendants' Exhibit No. 5.

Also offers in evidence letters patent of the United States, granted to Alonzo Newbury, July 17th, 1877, No. 193,175, and the same is marked Defendants' Exhibit No. 6.

Also offers in evidence letters patent of the United States, granted to Alonzo W. Jerome, Oct. 18th, 1881, No. 248,323, and the same is marked Defendants' Exhibit No. 7.

Also offers in evidence letters patent of the United States, granted to Benjamin F. Eaton, Sept. 25th, 1883, No. 285,398, and the same is marked Defendants' Exhibit No. 8.

Also offers in evidence letters patent of the United States, granted to Albert C. Moore, April 29th, 1884, No. 297,618, and the same is marked Defendants' Exhibit No. 9.

Also offers in evidence letters patent of the United States, granted to Charles C. Johnson, July 29th, 1884, No. 302,735, and the same is marked Defendants' Exhibit No. 10.

Also offers in evidence letters patent of the United States, granted to Charles C. Johnson, July 29th, 1884, No. 302,736, and the same is marked Defendants' Exhibit No. 11.

Also offers in evidence letters patent of the United States, granted to Charles C. Johnson, April 21st, 1885, No. 316,368, and the same is marked Defendants' Exhibit No. 12.

270 Also offers in evidence copy file-wrapper and contents of the letters patent granted to Oliver H. Hicks, August 25th, 1886, No. 325,174, and the same is marked Defendants' Exhibit No. 13.

Also offers in evidence copy file-wrapper and contents of the letters patent granted to Oliver H. Hicks, Sept. 1st, 1885, No. 325,410, and the same is marked Defendants' Exhibit No. 14.

Also offers in evidence copy file-wrapper and contents of the letters patent granted to Oliver H. Hicks, Feb. 15th, 1887, No. 357,993, and the same is marked Defendants' Exhibit No. 15.

Also offers in evidence letters patent of the United States, granted

to Job F. Peacock, March 6th, 1883, No. 273,594, and the same is marked Defendants' Exhibit No. 16.

Counsel for complainant waives certification of Defendants' Exhibits 6 to 12 inclusive, also Exhibit 16.

The further examination of defendants' witnesses is adjourned to the 10th day of April, 1888, at 11 a. m.

271 NEW YORK, *April 10th*, 1888.

Met pursuant to adjournment.

Present: Counsel as before.

SETH WHEELER, produced in his own behalf, and on behalf of other defendants, being duly sworn, says in answer to the interrogatories propounded to him by A. J. TODD, Esq., as follows:

Q. 1. Are you the same party who has already given a deposition in these suits on the part and in behalf of the complainant?

A. I am.

Q. 2. Please look at the roll of paper now shown you, and state whether or not you ever sold rolls of paper identical with the same.

Objected to as leading, and as calling for secondary evidence.

A. I have.

Q. 3. When did you first commence to sell rolls of paper like these?

A. With respect to the unperforated roll the first sale of which I have record was made in April, 1878.

The roll of unperforated paper referred to by the witness is offered in evidence as Defendants' Exhibit Unperforated Oval Roll No. 17.

Objected to as secondary evidence, no proper foundation having been made for the introduction of said exhibit.

272 Q. 4. To whom did you make the first sale of unperforated oval roll like Defendants' Exhibit Unperforated Oval Roll No. 17, in April, 1878, and in what quantity?

Objected to as leading and assuming and as calling for evidence of secondary character, these objections to apply to all further questions relating to said exhibit.

Defendants' counsel gives notice that any objection to the question must be specifically taken to that question, or it will be considered as waived.

A. H. O. Chase of Little Falls, N. Y., amount of sale 500 rolls.

Q. 5. State how those 500 rolls compared or differed from the roll, Defendants' Exhibit Unperforated Roll No. 17.

Objection repeated.

A. They were the same.

Q. 6. Were they either larger or smaller?

Same objection.

A. No; I think they were the same in every respect.

Q. —. How was this paper intended to be used?

Same objection.

A. To be torn off as required in requisite length.

Q. 8. On what part of the roll was the severance made?

Same objection.

A. It would naturally be torn across the sharp corner of the roll.

Answer objected to as being a mere opinion of the witness, not evidence.

273 Q. 9. Have you seen it so torn, or have you yourself torn it from the roll like Exhibit No. 17? If so, at how early a date?

Same objection as to previous question.

A. I have.

Q. 10. Are any of these rolls in existence which you so sold to Mr. Chase to your knowledge?

Same objection.

A. Not to my knowledge.

Q. 11. How long did you continue rolls of oval paper unperforated like such rolls as sold to Chase?

Same objection.

A. I think all of our rolls of that character were made unperforated for about two years; after that up to the present time we have continued to make both perforated and unperforated, of that form.

Q. 12. How did the perforated rolls compare or differ from the other roll now before you, to which you have already referred, which you commenced to sell two years subsequently to that first sale to Chase, of the unperforated roll?

Same objection.

A. They were substantially the same.

Q. 13. Did such perforated oval rolls vary in size from the perforated oval roll now before you, that is, were they larger or smaller, or was the interior opening with reference to the thickness of paper wound around it different?

Same objection.

274 A. We made them both larger and smaller. The diameter of the opening in center being in all cases larger or greater in diameter than the thickness of the paper around it.

The last roll of paper referred to by the witness is offered in evidence as Defendants' Exhibit Perforated Oval Roll No. 18.

Objected to as incompetent and secondary, no proper foundation

having been laid for the introduction of the exhibit, and the same not having been properly identified.

Q. 14. Are there in existence to your knowledge any of these oval rolls, which you testify were sold in the year 1878 and subsequently, and which you testified were like Exhibits 17 and 18?

Objected to as incompetent, and as improper and insufficient mode of examination, if it is intended to lay a foundation for the admission of said last-named exhibit.

A. I know of none other than those of recent manufacture.

Q. 15. Where did the Exhibits No. 17 and 18 come from?

A. From our factory at Albany.

Q. 16. Are they out of some of those manufactured for the trade, or were they specially made for exhibits in this case?

Objected to as leading.

A. The perforated roll was taken from stock from such as was manufactured for the trade. The unperforated roll was made as an exhibit, our sample of those we have previously made for the trade.

275 Q. 17. Do you mean to testify that you are at the present time only furnishing the small oval rolls to the trade in the perforated form like Exhibit No. 18?

A. Yes.

Q. 18. When did you cease to manufacture and sell the small unperforated oval rolls, Exhibit 17?

Objected to as calling for secondary evidence, and as assuming a similarity between the present exhibit and some other rolls not produced nor accounted for.

A. I am unable to state when we made the last rolls of that description.

Q. 19. About how long was that without having reference to your books?

Objected to as calling for mere guess-work, not evidence, the witness having already testified to his incompetence or inability to state when rolls referred to were manufactured.

A. After we commenced to manufacture the perforated roll we still continued to make the unperforated roll as called for. This may have continued for three or four years, possibly longer. I cannot state more definitely.

Q. 20. How were the sheets taken off the perforated oval rolls which you testified were made and sold in the form of Defendants' Exhibit No. 18?

Objected to as calling for secondary evidence, and for testimony in regard to facts that do not appear to have been within the witness' knowledge.

276 A. By unwinding and separating at the points of the lines of weakness made by the perforations.

Q. 21. Will you, or not, positively testify that the internal diamter of the bands, when in cylindrical form of these oval rolls, which you sold as early as the year 1878, was not of less than twice the thickness of the band at any one point?

Objected to as leading, and as calling for testimony in regard to a roll not produced nor accounted for.

A. The diameter was greater than twice the thickness of the band in all of the rolls referred to.

Q. 22. How was it with reference to all of such rolls in this respect which you sold since 1878 down to the present time, whether perforated or unperforated?

Same objection.

A. Same reply will apply to that question.

Q. 23. What were these oval rolls so sold from the year 1878, down to the present time used for?

Same objection.

A. They were manufactured for use as closet paper.

Q. 24. Were they to be distributed in bath-rooms or water-closets for use?

Objected to as leading.

A. No.

Q. 25. How were they to be used?

A. They were intended to be carried by the person using them, in their pocket or elsewhere, as might be most convenient.

277 Q. 26. Have you made search in your factory to see if you could find any of these early rolls of oval paper which were so made to be carried for pocket use?

A. I have, but have been unable to find other than those of recent manufacture.

Q. 27. Do you believe that you can, at this late day, find any of the earlier rolls which you so made and sold for pocket use of this paper?

Objected to as calling for a mere opinion, not evidence.

A. I don't think I can.

Q. 28. Why not?

Same objection.

A. They are an article that is usually, quickly, and effectually disposed of by the purchaser.

Q. 29. Have you asked any of your agents to learn if they had any of these oval rolls which were a few years old or older?

A. I have, and made diligent search where I thought there was a possibility of finding them, but without success.

Q. 30. Has your New York agent, H. B. Smith, sold these oval rolls, both perforated and unperforated rolls, and if so, for about what length of time?

A. I don't remember that he has sold any of the unperforated rolls. He has sold perforated rolls, and I think the first were sent him in 1881 or 1882.

Objected to as secondary evidence.

Q. 31. Has he had them from you since that year?

A. He has.

Answer objected to as secondary evidence.

278 Q. 32. I see that the fixtures, Defendants' Exhibit G Fixture, and Complainants' Exhibit Defendants' Fixture D, are the same in construction, except that D fixture has a tin core plate, and the word Universal branded on the fixture. Why was fixture D called Universal?

A. Because its construction admitted the use of perforated roll or an unperforated roll, whether cylindrical or oval.

Q. 33. What paper accompanied these Universal fixtures like fixture D, perforated or unperforated?

A. Either, or both, the will of the purchaser.

Q. 34. When unperforated rolls accompanied the Universal fixture, Exhibit D, was the core plate used?

A. It was not.

Q. 35. How was the unperforated paper operated on Exhibit D?

A. With a cylindrical roll. A cylindrical core was furnished, the paper being suspended upon it in the fixture. This core was like Defendants' Exhibit Wooden Roll F.

Q. 36. Was the unwinding of the unperforated paper, and breaking of it off for use, done by means of a stop or cutter, or both a stop and cutter?

A. It was not.

Q. 37. How is the paper broken off these Universal fixtures when the perforated rolls are used upon them, and state whether such rolls were in the roll or oval form, and had a core plate?

A. The rolls were of oval form, provided with a thin core plate, and the paper was broken at the line of weakness by the strain and pulling upon the roll.

Q. 38. Did any of these Universal fixtures, which you have ever sold with this oval perforated paper, have a knife edge or bar upon which the paper was broken or severed?

A. No.

279 Q. 39. What was the object or use of this tin core plate, so called, which is attached to the Universal fixture, Complainant's Exhibit Defendants' Fixture D?

A. To suspend and maintain the oval form of the roll.

Q. 40. Would the oval roll operate as well if the tin core plate were cut away if you could keep the roll extended or stretched out to preserve its form without it?

A. It would.

Q. 41. What causes this oval roll on this Universal fixture to drop into position again after having pulled the sheet from it? Is it the core plate?

A. It is the weight of the paper which causes the backward movement of the roll.

Q. 42. Then the roll drops back again, does it, by its own weight or by gravity?

A. It does.

Q. 43. Is this tin core plate weighted in any part of it?

A. No; it is not.

Q. 44. Has the Universal fixture, Exhibit D, a stop on any part of it?

A. Not in the meaning of the word as used in connection with the Hicks fixture.

Answer objected to as the qualification of the witness under this line of examination has not been shown.

Q. 45. Have you carefully read and examined the Hicks patent here in suit, and do you, or not, fully understand the construction and mode of operation of the mechanisms therein described and claimed called fixtures?

Objection to the last answer repeated.

A. I have, and I think I understand it.

280 Q. 46. Are there any paper-roll-holder patents or patents on fixtures and paper rolls that you have not carefully examined and compared with each other since such patents have commenced to be issued by the United States Patent Office?

Same objection.

A. I don't know of any that I have not examined and compared.

Q. 47. Who was the first party that commenced to take out patents in this particular line of invention?

Same objection to apply to all other questions in the same line of examination.

A. I am the first that I have any knowledge of.

Q. 48. Have you, or not, taken out numerous patents and filed applications for paper-roll-holder fixtures and rolls?

A. I have.

R. 49. About how many patents and applications in round numbers?

A. I should say about twenty-five.

Q. 50. With large round roll, Exhibit F, in the perforated roll of paper was the function of the Universal fixture, or the perforated roll changed from what it was when the roll was placed on the thin core plate; that is to say, did the fixture operate any differently, or did the sheets break off other than on the line of perforations or weakness?

A. No; there was no difference in the operation of the fixture.

Q. 51. Was O. H. Hicks the patentee referred to in the patents upon which these suits are founded the first to use a stop in a fixture in order to break off a determinate amount of paper in a sheet from a continuous roll of unperforated paper?

A. He was not.

281 Q. 52. Can you refer to a fixture with a stop in it for such a purpose prior to Hicks' patent?

A. I can. One Chas. C. Johnson, of Springfield, Vermont, to whom was issued a patent dated July 29th, 1884, for a holder, in which is shown a stop arranged to limit the length of sheet separated.

Q. 53. Please look at the model now shown you, and state whether that represents such a fixture as is described in that Johnson patent?

A. It does.

Fixture referred to is offered in evidence as Defendants' Exhibit Johnson Stop Fixture No. 19.

Q. 54. From whom did you buy the oval King fixtures like Complainant's Exhibit "C" Fixture, which you have sold or used, or which the Albany Perforated Wrapping Paper Co. sold or used?

A. From the Hudson Valley Paper Co. of Albany, N. Y.

Q. 55. What are their relations to the complainant in these suits?

A. They are understood to be the Albany agents of the complainant.

Answer objected to in so far as it tends to establish the said company as the agents of the complainant, as incompetent.

Q. 56. Has this company ever admitted to you that such a relation exists between them and the complainant as you state?

Objected to as any admission of the company if such had been made would not be competent to prove the agency, much less the testimony of this witness as to any such admission.

282 A. The proprietors of this company have stated to me that they had the sale in Albany of the goods manufactured by the Morgan Envelope Co. of Springfield, Mass.

Q. 57. Have you ever had any reason to doubt this statement?

A. I never have.

Q. 58. Did you ever make one of these oval King fixtures, or did the Albany Perforated Wrapping Paper Co. make them, or have you any knowledge of the Hudson Valley Paper Co. making them?

A. Not to my knowledge.

Q. 59. Please produce a duplicate bill of one of the purchases from the Hudson Valley Paper Co. of one lot of these oval King fixtures.

A. I produce a bill which was given to me by Mr. Jones, one of the proprietors of the Hudson Valley Paper Co.

Paper offered in evidence as defendants' O. K. bill, No. 20.

Q. 60. When, if at all, did the complainant, The Morgan Envelope Co., make any objection to your so buying O. K. fixtures from the Hudson Valley Paper Co.?

A. During the past winter we were advised by the Hudson Val-

ley Paper Co. that the Morgan Envelope Co. declined to furnish fixtures which we had ordered from the Hudson Valley Co.

Q. 61. Then all the unperforated oval rolls like the Defendants' Exhibit Roll A, which you or the Albany Perforated Wrapping Paper Co. made and sold were only used upon lawfully made oval King fixtures, that is to say, on those sold to you by the agents of the complainant, or on those in use by others of the public who had purchased them from the complainant either directly or indirectly?

Objected to as leading and assuming that which has not been proved.

283 A. Yes that is my belief.

Answer objected to as mere opinion, not evidence.

Q. 62. Please look at the small oval roll of paper now shown you, and state what it is.

A. It is a roll of paper made in conformity with the drawing shown in connection with a patent issued to Job F. Peacock of New York, No. 273,594, dated March 6th, 1883, marked Defendants' Exhibit No. 16 in these suits.

Q. 63. How is the internal diameter of this roll when in cylindrical form as compared to twice the thickness of the band at any one point?

A. It is a little greater.

Defendants' counsel offers in evidence the paper roll as Defendants' Exhibit Peacock Roll, No. 21.

Q. 64. Please look at the oval roll of paper marked Defendants' Exhibit No. 4, say who made it and what it represents.

A. It was made at the factory of the Perforated Paper Co. at Albany, made in conformity with the Peacock patent, but of larger size than the Defendants' Exhibit No. 21. The internal diameter being the same as Exhibits 17 and 18.

Q. 65. Please look at the oval roll of paper marked Defendants' Exhibit No. 3, say who made it, and what it represents.

A. Exhibit No. 3 was also made at the factory of the Albany Co. in accordance with the Peacock patent, and having an internal diameter corresponding with that of Complainant's Exhibit Defendants' Perforated Roll "E," used with the Universal fixture "D."

284 Q. 66. Please look at the oval roll of paper marked Defendants' Exhibit No. 2, say who made it, and what it represents.

A. Exhibit No. 2 is a roll also made at the factory of the Albany Perforated Co., having an internal diameter corresponding with that of Complainant's Exhibit Complainant's Roll B (oval King), but with an external diameter corresponding with the proportions of the Peacock roll, Defendants' Exhibit No. 21, and the Peacock patent.

Q. 67. Then are all these rolls, Defendants' Exhibits 2, 3 and 4,

made after the proportions shown in the Peacock patent, of internal diameter relative to twice the thickness of the band, only in size larger than shown in the drawings of said patent?

A. They are.

Q. 68. Are these rolls Defendants' Exhibits 2, 3, and 4, a continuous band of paper, whose internal diameter, when pressed into cylindrical form, is not less than twice the thickness of the band at any one point, as stated in the specification and claims of the Hicks patent No. 225,410?

A. They are.

Q. 69. Have you general knowledge of the putting up of cloth, linen, muslins, silks, and other dry goods, in rolls of oval form which have, as stated in the claim and specification No. 325,410, an internal diameter when in cylindrical form, equal to, or greater than, twice the thickness of the band of cloth or other article at any one point, and if so, how long has such been of common or notorious use to your knowledge?

The leading character of the question is objected to.

A. I have such general knowledge, and my recollection of such rolls of fabric extends as far back as I can remember.

285 Q. 70. Was a bundle of paper, consisting of one or more lengths, formed into a continuous band, whether of round or oval form a thing of novelty prior to the year 1884?

A. It was not.

Q. 71. Could such rolls of paper, such as you sold as early as the year 1878, and continued to sell down to the present time, and which you testify were like rolls (Defendants' Exhibits 17 and 18) have been used upon fixtures so as to give a determinate and practical length of paper for use each time of operating the fixture?

A. They could.

Q. 72. Can you produce a form of fixture with one of these rolls inserted therein by which the result mentioned in the last answer could be effected?

A. I can; I have such a fixture by me.

Defendants' counsel offers in evidence the fixture as Defendants' Exhibit Small Oval Roll Fixture No. 22.

Adjourned to April 11th, 1888, at 11 a. m.

NEW YORK, *April 11th*, 1888.

Met pursuant to adjournment.

Present: Counsel as before.

Q. 73. You refer in answer to question 13 to having made these oval rolls, both larger and smaller than represented by Defendants' Exhibits Nos. 17 and 18. Will you please describe those other rolls?

Objected to as calling for secondary evidence.

286 A. The smaller one was a roll having an internal diameter the same as Exhibits 17 and 18, but with a less amount

of paper on the roll. The larger one was also the same internal diameter, but with a greater amount of paper on the roll.

Q. 74. Can you produce any of these rolls which you have been able to find, and which were made and sold more than two years prior to September 1st, 1885?

Objected to as leading.

A. I can. I have two which were obtained at the office of our New York agent, Mr. H. B. Smith, this morning. These two rolls which I now produce were of a lot made and sold to Mr. Smith in 1882. This is the smallest size.

Defendants' counsel offers in evidence the two oval rolls produced by the witness as Defendants' Exhibit Small Rolls, No. 23.

Objected to as not properly proved, and therefore incompetent.

Q. 76. To what extent did you manufacture and sell rolls of oval paper like the rolls (Defendants' Exhibit Small Rolls No. 23); that is, state during what years you put them on the market, and also whether you keep them in stock at the present time?

A. I am unable to state exactly how many such rolls were made, but it was a large number, not less than one hundred thousand, and I should say considerably in excess of that. We have had them continually in stock since that time.

Q. 77. Have you, since you commenced to manufacture and sell these small rolls in the form of the pocket companion in the year 1882, varied their size, proportions, or manner of putting
287 them up from what is shown in the small rolls (Defendants' Exhibit No. 23)?

A. The exhibit referred to, and which we designate as our one-cent pocket companion, has not been varied in its proportion, size or appearance from that shown in the exhibit.

Q. 78. Have you been able to find any of the larger rolls made at a very early date, referred to in answer 13?

A. I have not.

Q. 79. Have you made an oval roll which faithfully represents those larger oval rolls referred to in answer to question 13 in every respect, if so, will you please produce it?

A. I have, and here produce it.

Defendants' counsel offers in evidence roll as Defendants' Exhibit Larger Oval Roll, No. 24.

Q. 80. To whom did you sell rolls like Defendants' Exhibit No. 24 Roll, and at how early a date?

A. Morris Hart & Co. in 1882.

Q. 81. How many rolls were there in this purchase?

A. I don't recollect the amount of the first order. It was not less than one thousand rolls. We had several orders from Mr. Hart for rolls of this description during the years 1882 and 1883. I should say that we sent Mr. Hart a total of not less than three thousand rolls, and in my judgment, without reference to our books, I should say we might have sent him five thousand of these same rolls.

Q. 82. Where were these rolls like Defendants' Exhibit No. 24, ordered of you?

A. The first order was given by Mr. Hart, in person, at our factory in Albany. Subsequent orders were sent by Mr. Hart, by mail, from his office in London, England.

288 Q. 83. You state, in answer to question 13, that you are, at the present time, only furnishing oval rolls to the trade like Exhibit 18, and not the Exhibit 17. Can you produce any other roll besides Defendants' Exhibit No. 18 roll out of the same size that you have on the market?

A. I have one, a sample of our medicated toilet paper.

The sample produced by the witness is put in evidence as Defendants' Exhibit No. 25.

Q. 84. How long have rolls of medicated toilet paper similar in every respect to Defendants' Exhibit No. 25 been on the market?

A. Since 1884. I am unable to state exactly without reference to our books, but I think as early as July, 1884.

Defendants' counsel requests the witness to transmit to the examiner a copy of the entry of the first batch of rolls manufactured and sold and put into public use like Defendants' Exhibit No. 25, complainant's counsel having the right if he wishes hereafter to have the witness recalled for cross-examination on such entry or entries.

Q. 85. You refer to the first sale of rolls of unperforated paper like Exhibit 17 as having been made in April, 1878. Can you produce the book of original entries which contains the record of that sale?

A. I can and now produce it.

Q. 86. Please read to the examiner the entry referred to.

A. April 20th, 1878. H. O. Chase, Girvan house, (63) Little Falls; 500 rolls of 68 ft. W. C. paper at 2½c., $12.50. Send as soon as you can.

289 Q. 87. Please explain the meaning of this entry.

A. The order is for 500 rolls of paper, 5 inches wide, 68 feet of paper in each roll, at 2½ cents per roll.

Q. 88. Did you furnish said Chase any more of this paper subsequently?

A. Not that I remember.

Q. 89. Do you know where said Chase is at the present time?

A. I do not.

Cross-examination *de bene esse* by MELVILLE CHURCH, Esq.:

X Q. 90. What was the inner diameter of the pocket rolls like Defendants' Exhibits Nos. 17 and 18 that you have referred to in your testimony?

A. One and one-eighth inches.

X Q. 91. And what the external diameter?

A. One inch and a half. These diameters are given assuming that the roll is in a circular form.

X Q. 92 What was the internal diameter of rolls or packages like Exhibits Nos. 23, 24, which is the larger roll, and 25, which you state you made?

A. One inch and an eighth.

X Q. 93. Am I to understand that all the rolls which you have stated that you made prior to the date of the Hicks invention, were of an internal diameter of an inch and an eighth, though of varying external diameter, accordingly as there was more or less paper on the roll?

A. Yes.

X Q. 94. How do you account for this uniformity in internal diameter?

A. From the fact that in winding these rolls it was done on the same machine that we run our regular toilet paper on, the winding shaft of which was one and one-eighth inch diameter.

290 X Q. 95. None of the rolls which were wound on this shaft of one and an eighth inch diameter were intended to be constructed so that a single convolution taken from any part of the roll would afford a sheet of a size desirable and practicable for use, were they?

Objected to as immaterial.

A. No.

X Q. 96. The idea in the construction of all of said rolls was, that an amount of paper sufficient for use should be unwound from the roll and then torn off, was it not?

A. The idea was of two or more convolutions to be used as might be required.

X Q. 97. In the sale of the unperforated pocket roll no instructions were given as to where the paper was to be torn, were there?

A. No printed instructions were ever given to my knowledge.

X Q. 98. Any other kind of instructions?

A. When showing a paper it was customary to unwind a portion of the roll for the purpose of showing how it could be used, the convenience of it, &c.

X Q. 99. On such occasions, at what point on the roll was the tear made and why?

A. Near the corner or thin edge of the roll, and in consequence of the sharp angle there presented the paper was separated.

X Q. 100. The advantage of tearing the paper at the short end of the elliptical roll you then recognized, did you not?

A. Yes.

X Q. 101. When you passed from the unperforated pocket roll like Exhibit No. 17 to the perforated pocket roll like Exhibit No. 18, where then did you intend that the paper removed from the roll should be separated?

291 A. At the perforations.

X Q. 102. And these perforations might occur at any point on the roll, might they not?

A. They might.

X Q. 103. So that the elliptical form of the roll in the case of the

perforated roll did not aid at all in the separation of the sheets; am I not right?

A. On the contrary, it still aided in separating the sheets squarely at the perforations, by producing a uniform resistance to the pull or strain upon the sheet.

X Q. 104. A more uniform resistance than if the roll were round?

A. Yes, in consequence of the small amount of paper, it would not in a cylindrical form present an unyielding resistance.

X Q. 105. Was not the flattening of so small an amount of wound tissue paper as was contained in those pocket packages a necessity, in order that they could be conveniently carried in the pocket? In other words, would they not have assumed a flattened form if placed in the pocket without an internal support?

A. The rolls were made of the proportions shown to admit of flattening.

X Q. 106. Assuming that the invention covered by the Hicks oval-roll patent, No. 325,410, consists in an oval roll of paper, so constructed that its innermost convolution will give a sheet of paper eight inches and three-quarters in length, and that its outermost convolution will give a sheet from twelve to fifteen inches in length, do you find that either of your pocket packages, Exhibits Nos. 17 and 18, or your larger oval roll, Exhibit No. 24, or your medicated roll, Exhibit No. 25, would fall within the patented invention?

A. I do not find that either of the exhibits specified would yield a sheet or sheets of the length mentioned from a single convolution.

292 X Q. 107. Do you not find from a reading of the Hicks roll patent referred to, that the patentee designed to remove but a single convolution at a time from his roll, for the purpose of producing a sheet of suitable dimensions for use?

A. I do.

X Q. 108. Do you not find that the exterior convolution of either Exhibits 17, 18, 23, 24 or 25, is much shorter than the exterior convolution of the roll described in the Hicks patent?

A. I do.

X Q. 109. You never intended that any of your pocket packages like Exhibits 17, 18, 23 or 25, should be used in connection with a fixture, did you?

A. No.

X Q. 110. When was the fixture having the pocket package on it, and marked Defendants' Exhibit No. 22, made, and by whom, and for what purpose?

A. It was made by me in January, I think, of the present year, to illustrate the fact that our small rolls could be used on a fixture if desired. During the course of the examination at Springfield the idea suggested itself to me.

X Q. 111. You never mounted an oval roll of paper in a fixture prior to your knowledge of the Hicks invention, shown in his several patents in suit, did you?

Objected to as Hicks' patent 325,410, is for an oval roll of paper for hand use as well as fixture use.

A. No.

X Q. 112. Referring now to the Peacock patent, No. 273,594, I find that said patent is entitled an improvement in toilet-paper pocket cases, will you please examine said patent, and tell me if you find anything therein indicating that the bundle of
293 paper therein described was intended to be used in anything but a pocket arrangement?

Same objection continued, as Hicks' patent No. 325,410, does not show any fixture in connection with the bundle of paper, and specifically states in the specification that it may be used by hand. The Peacock patent shows more in this respect than the Hicks patent.

A. No.

Recess.

X Q. 113. Do you think it consistent with the patentee, Peacock's statement, that his invention consisted in a toilet-paper pocket case, that he ever intended to produce a roll of paper for use in such a pocket case, having the dimensions of the roll described in the Hicks patent?

A. Admitting that Peacock's drawings form a part of his statement, it does seem to be consistent. I see nothing in his specification placing any limit upon the size of his roll.

X Q. 114. What do you understand the patentee Peacock to mean by the expression "pocket case"?

A. A case that may be carried in the pocket.

X Q. 115. Do you not get the idea from his patent that his pocket case is intended to be small and compact, and to contain a quantity of paper for use, such a pocket case in fact as can be readily carried in the pocket without being inconvenient and conspicuous?

A. Yes, within a reasonable limit.

X Q. 116. What are the dimensions of the little rolls of paper shown in Exhibit No. 21, which you say you have made in accordance with the drawing of the Peacock patent?

294 Objected to as assuming that the Peacock patent is confined to the exact size of roll shown by Defendants' Exhibit No. 21, whereas in fact the Peacock roll illustrated in the drawing is not of a size practical for ordinary use, and would have to be made large enough, observing the proportions of the roll for such use, which might bring it within the size of any of the rolls before us, or the complainant's or defendants' alleged infringing roll.

A. I find the interior diameter of the Exhibit 21 to be three-eight-s of one inch, the exterior diameter to be eleven-sixteenths of one inch when in circular form.

X Q. 117. Should you regard the roll Defendants' Exhibit No. 2 such a one as Peacock intended to be carried in the pocket within his holder or pocket case?

A. I consider it larger than I would wish to carry.

X Q. 118. Could you get that roll Exhibit No. 2 in any pocket of the suit of clothes you have on?

A. Yes, I can get it in my pocket.

X Q. 119. You have succeeded in getting it in the tail pocket of your coat, but I will now ask you if said roll is not as thick, nearly as wide, and within two inches as long as a bound volume of the Federal Reporter which I now show you.

Objected to as being incompetent and improper, the Federal Reporter not being an exhibit in this case, nor having any connection therewith, except counsel can cite some law therefrom bearing upon the case, which more properly belongs to its use.

A. If the bound volume shown me is a copy of the "Federal Reporter," I answer yes.

295 X Q. 120. Would you call the roll (Exhibit No. 3) a pocket roll such as contemplated in the Peacock patent?

A. Such a roll may come within Mr. Peacock's meaning, but it is larger than I would like to carry about with me.

X Q. 121. Same question as to Exhibit No. 4.

A. That strikes me as being a suitable roll for the purpose described by Peacock.

X Q. 122. If the roll shown in the Peacock patent were intended to be of the diameter of Exhibit No. 2, how long would it be if the proportions shown in the drawing were carried out?

Objected to, as it does not appear that the length of roll would be increased necessarily, because the other parts are increased to get the proper length of paper. The question is therefore immaterial.

A. I find the length of the Peacock roll, as shown in the drawings, to be about four times the short diameter. On this basis the length of the roll made in accordance with the diameter of the roll, as shown in Exhibit 2, would be 12 inches.

Question and answer further objected to on the ground that the witness might just as well be asked to correspondingly increase the sheet of paper, and give its thickness when the roll was enlarged, thereby bringing the thickness of the convolutions probably within pasteboard limits.

X Q. 123. Then it is not the fact that if Exhibit No. 2 had embodied all of the proportions of the roll shown in the Peacock patent it would have been longer by three inches than the volume of the "Federal Reporter" I have shown you?

Same objections continued.

296 A. It would.

X Q. 124. You would hardly call that a pocket package, would you?

A. It might do for an overcoat pocket.

X Q. 125. Did you ever know toilet paper to be furnished to the trade in rolls as large as Exhibit No. 2?

A. Yes.

X Q. 126. Give an instance.

A. The Albany Perforated Paper Co. has furnished considerable quantities of it, and still has a demand for it.

X Q. —. You don't term them pocket packages, do you?

A. I do not.

X Q. 128. How do you understand, from the patent of Peacock, that his roll of toilet paper is to be used?

A. As I understand the Peacock patent, the pocket case is to be used as a handle for the roll of paper, the paper being used before it is detached from the roll; in separating which the roll is held so as to draw the sheet across the sharp corner of the roll; but, in my judgment, it might be found preferable in some cases, if not always, to separate the sheet before using.

X Q. 129. Do you find any statement in the specification of the patent to indicate that the inventor intended to detach a piece of the paper before using it?

Objected to as immaterial, as the public are not bound by what Peacock said in his specification, it appearing that the roll could be taken off the fixture and be used separately, as is the case with the Hicks patented roll in suit.

A. I do not.

297 X Q. 130. In using the paper on the roll, "so that the edges or the sides may be used as desired, or most fitting to the parts to be used," to quote the language of the patent, do not you think it would be desirable that the outermost convolution of the paper should be secured down in some way in order to prevent its flopping around while being used?

A. I think it would.

X Q. 131. Does not the patentee, in his specification, point out that the convolutions are to be held either by gum placed between them or by an elastic band applied around the roll?

A. Peacock mentions the use of both gum and an elastic band, which suggestion led me to think he may have had it in mind to take a portion of the paper from the roll before using, should it be required. This the elastic band would permit him to do.

X Q. 132. Assuming that the Peacock roll was intended to be made of the size of the Hicks roll could the removal of the paper from it be accomplished in the manner that Hicks points out in his patent, if the sheets or convolutions were secured together either by paste or gum applied between them or by an elastic band enclosing them? I refer to the operation described in the Hicks patent, of pulling on the free end of the paper so as to cause the detachment of a sheet at the upper rounded corner of the roll, and the dropping of the end of the next piece down into position to be grasped when the second sheet is to be removed?

A. If the paste is applied, as directed by Peacock, I see no difficulty in separating the sheet, as proposed by Hicks, while the sheet, in all cases, would not then drop down, as described by Hicks, it could readily be grasped and separated on the paste line. Where

the band is used, as proposed by Peacock, to retain the paper
298 in the form shown, the removal of it, as suggested, Peacock may have had in mind, would admit of the separation of the sheet and its falling in precisely the same manner set forth by Hicks.

X Q. 133. Do you find, from the specification of the Peacock patent, that his roll of paper was intended to have any piece-measuring quality such as complainant's expert has referred to in discussing the Hicks patent and inventions?

Objected to, as the claim of the Hicks patent, No. 325,410, is not limited to a bundle of paper having any particular piece-measuring quality.

A. I see no reference to piece-measuring, but it is obvious the device would have that quality or function.

X Q. 134. Do you find in the Peacock patent any statement to the effect that one convolution of paper is intended to be detached at a time?

A. It seems to me quite clear that it must be so, inasmuch as one side or edge of the roll being used a single convolution detached would remove all the soiled portion, and to remove more than that would be useless and unnecessary waste.

X Q. 135. Do you think it would be sufficient to remove but one convolution under all conditions of use?

A. It might not in all cases, as it sometimes becomes necessary to use several thicknesses of paper, but in the majority of cases I think that would be found quite sufficient.

X Q. 136 Do you not think Peacock's provision of a case for his paper a wise one?

A. I think it a desirable one.

X Q. 137. Do you regard Peacock's invention as of any practical value?

299 A. I think there are people who would consider it a desirable article. Whether there is a sufficient number to be found to make it a profitable article of trade I am unable to say.

X Q. 138. What is your own opinion?

A. I should prefer, for my own use, the pocket packages made by the perforated-paper company.

X Q. 139. I find in the Peacock patent this statement: "Said core or spool is preferably of oval form, in cross-section, to give the paper covering the same form, so that either the edges or the side may be used as desired, or most fitting for the parts to be used." Do you find any other statement in the patent, besides this one, indicating the purpose or object of using the paper in oval form?

A. I find what seems to me a reference to the form in the description of the case shown in figure 1, which is spoken of, with the parts, as being all folded together, as shown in the section, that it may be either carried in the pocket.

X Q. 140. In your direct examination you have referred to the putting up of textile fabrics in the form of an oval package as being a matter of common knowledge. Did you ever know of any

textile fabrics being put up in the form of an oval package with a view to the separation of just one convolution each time from the package?

Objected to as immaterial, as the Hicks patent No. 325,410, is not limited to a bundle from which one convolution can be separated at a time which shall be of a certain length in inches.

A. No; not that I remember.

X Q. 141. Did you ever know of textile fabrics being put up in wound oval bundles with a view of preventing wastage?

A. I am unable to state what the ideas of the manufacturers may have been.

300 X Q. 142. I do not understand that you deny the advantage that an oval roll, such as the Hicks roll has over a round roll in respect to its being capable of being used, one convolution at a time until it is entirely consumed, and affording from first to last pieces of a size desirable for use, am I not right in this?

Objected to as improper, as not cross-examination, and as asking the witness' opinion from the soundness of the opinion of counsel.

A. I do not deny that the roll mentioned has advantages over the cylindrical roll as ordinarily used. I do deny that it has any advantages over a flattened roll in which two or more convolutions may be taken therefrom.

X Q. 143. What advantages has a roll like the Hicks roll over the ordinary round roll wound up from an internal diameter, of say one and one-eighth inches?

Objected to as not in cross-examination.

A. It has an advantage over the cylindrical roll as ordinarily used, or as used without a measuring device in that it limits the amount of paper which can be taken from it when suspended in a fixture by a single pull.

X Q. 144. Does it not present the advantage also of affording a roll, which without any fixture will enable the operator to withdraw or separate one convolution at a time, and a convolution too that is of a practicable and desirable length for use?

Objected to as immaterial, as the claim of patent No. 325,410, is not limited to any particular size of convolution, but only to relation of diameter to the thickness of the band.

301 A. There may be some advantage in this. It does not however strike me as an important one.

X Q. 145. I hold in my hand a patent granted to you May 11th, 1886, No. 341,709, in which you show an oval roll of paper and a fixture for use therewith, and intended to cause the separation of one convolution of paper from said oval roll at each operation. In the specification of said patent I find the following statement: "Many advantages result from this construction and mode of operation, some of which are simplicity of arrangement and of being able to obtain a sufficient amount of paper for use, notwithstanding

the roll is nearly used up. This is not the case when the arrangement of fixture adapted to a round roll is used for each revolution of the round roll, when it is reduced to about one-half its quantity practically gives sheets too short for use, thus rendering such other fixtures to a large extent practically useless." Is not this statement a recognition of the value of an oval roll, and of its advantage over a round roll?

A. The statement referred to was made with reference to a roll as then used in a fixture patented by C. C. Johnson, No. 328,409, patented October 14th, 1885, having a small central opening. It is clear that with the cylindrical roll with an interior diameter of proper size for use, the same result could be reached as in the use of an oval roll.

X Q. 146. But you knew of no such cylindrical roll prior to the date of Hicks' invention of the oval King roll, did you?

A. Not that I remember at that time.

X Q. 147. Then if a roll like the Hicks oval roll has advantages over the old cylindrical roll wound up from an inch and a quarter center, Hicks is entitled to the credit of having first produced such an oval roll; is he not?

302 Objected to as not proper cross-examination, argumentative and as drawing an illogical conclusion in view of the state of the art outside of the Johnson round-roll patent, No. 328,409, which state of the art it does not appear that the witness then had knowledge of. Further as incompetent asking the witness' conclusion instead of interrogating him as to the facts from which the court is to draw a conclusion.

A. I am not prepared to admit that Hicks was the first to produce an oval roll.

X Q. 148. Do you not think that the person, whoever he was, who first produced an oval roll of paper having such internal diameter as to afford convolutions throughout of a size desirable for use, and involving the minimum amount of wastage, made an article that had advantages over an ordinary cylindrical roll wound up from an inch and an eight- center?

Objected to as claim of patent 325,410, is not limited to the particular size of convolution, and that the round roll of the Johnson patent, No. 328,409 presents no part of all the state of the art in this case or of the defenses to the oval-roll patent.

A. I am unable to see any invention in the enlargement of the internal diameter of the roll of paper.

X Q. 149. But you admit advantages to flow from the enlargement of such internal diameter; do you not?

Objected to as immaterial, referring simply to a question of degree.

303 A. If it is desired that a single convolution shall yield sufficient paper for use, it is clear that the roll must be made of internal diameter to yield that.

X Q. 150. To your knowledge that enlargement was never made prior to the production of the Hicks oval King roll, was it?

Same objection.

A. Not that I am aware of.

X Q. 151. I have here another patent granted to you on the 11th day of October, 1887, and numbered 371,290, which also shows an oval roll like the Hicks roll, from which one convolution is adapted to be separated until the roll is used up, the internal diameter of the said roll being large enough to make all the sheets or convolutions of a size desirable for use. This oval roll is shown in connection with a fixture for holding it. I would like to ask you if this patent does not also afford an illustration of the advantage of a roll constructed in accordance with the Hicks patent?

Objected to as not in cross-examination, and as asking the witness relative to a fixture patent where the oval roll itself is only in issue, and it is invalid, as claimed by the defendants, in view of the existence of certain other oval rolls shown in patents and put into public use.

A. In the respect that the internal diameter of the roll, as shown, is greater than the thickness of paper, it comes within the Hicks claim.

X Q. 152. The sheets from such roll, representing each one a convolution thereof, are also like those taken from the Hicks roll, in that they are of a practicable size for use, are they not?

304 Same objection, and as limiting the question to size or length of sheet for which Hicks has not got a claim.

A. They would be, the proportions of the roll being the same.

X Q. 153. Have you ever sold any fixtures such as shown in your patent 341,709?

A. No.

X Q. 154. What kind of fixtures were rolls like Defendants' Exhibit No. 24 intended to be used with?

A. I am unable to say, as we did not furnish the fixtures for this paper.

X Q. 155. Have all the fixtures like complainant's fixture C (the oval King fixture), which you have sold or used, been procured by you or your company directly or indirectly from the Hudson Valley Paper Co.?

A. I think not.

X Q. 156. From what other source or sources have fixtures been procured?

A. I think all those we have had at Albany were procured from the Hudson Valley Company. I think Mr. Smith, our New York agent, procured some of them here. How many I do not know, or of whom he obtained them.

Defendants' counsel objects to the latter part of the answer as to the oval King fixtures bought and sold by H. B. Smith as fixtures

which these defendants are not liable for, assuming that they are unlawfully made fixtures.

R. D. Q. 157. Having reference to your answer to X Q. 143, I wish to know if you find in the Johnson patent of 1884 (Defendants' Exhibit 10), and the Johnson model (Defendants' Exhibit No. 19) the same advantage you find in the Hicks roll over the ordinary
305 round roll stated by you, namely, that the amount of paper which can be taken from the roll is limited and taken off by a single pull.

A. I do.

R. D. —. 158. Having reference to your answer to X Q. 122, would you, while enlarging the size of the roll shown in the drawings, get a practical roll either for the case fixture or for use outside of the case fixture shown in the drawings, would you lengthen at same time beyond a certain limit the length of the roll?

A. No, I would not.

R. D. Q. 159. What is the constant width of the paper, no matter what the size or thickness of the package is?

—. The usual width is five inches.

R. D. Q. 160. Is the oval King roll, which, as stated in the patent, can be used irrespective of the fixture, of a size that could be conveniently carried in the pocket?

A. It is larger than anything that we make for pocket use.

R. D. Q. 161. Is there anything in the Hicks patent 325,410 which discountenances the idea of making the roll smaller than the preferred proportions given when the roll is not to be used on a fixture so that it could be carried in the pocket as a pocket toilet paper?

A. No, there is not.

SETH WHEELER.

Subscribed and sworn to before me, this 11th day of April 1888.

ANDREW M. TODD,

[L. S.] *Notary Public, N. Y. Co., Special Examiner.*

Adjourned pursuant to agreement.

Indorsed: Notice of taking testimony on behalf of defendants for March 27, 1888. Depositions of William J. Morton and Seth Wheeler. Filed Mar. 8, 1890. W. S. Doolittle, clerk.

306 NEW YORK, *July* 17, 1888.

Met pursuant to agreement.

Present: Counsel as before.

HENRY B. SMITH, a witness, being produced on the part of the defendants, and duly sworn, in answer to interrogatories propounded to him by A. J. TODD, Esq., says as follows:

Q. 1. What is your name, age, residence and occupation?

A. Henry B. Smith, age 47 years, residence 221 West 122d street, New York city, agents for the Albany Perforated Wrapping Paper Co. in New York city.

Q. 2. Will you please state whether you have ever sold in the city of New York, oval rolls of toilet paper, if so, at how early a date did you first commence to sell such paper?

Objected to as indefinite and leading.

A. I have. I began to sell them about November, 1882.

Q. 3. Can you produce any of these oval rolls such as you began to sell as early as November, 1882? And, if so, please do so.

Objected to as calling for secondary evidence.

Q. continued. I mean, produce if you can, any of those rolls which you had for sale as early as November, 1882?

A. I can; these are some of them (witness referring to rolls marked Defendants' Exhibit Small Rolls No. 23).

Q. 4. Will you please give from your books a memorandum of your first invoice of oval rolls, I mean such rolls as are represented by Defendants' Exhibit Small Rolls, No. 23?

307 A. November 18th, 1882, received from the Albany Perforated Wrapping Paper Company thirty thousand rolls. These rolls were all like Defendants' Exhibit Small Rolls, No. 23.

Q. 5. What was the next style of oval roll of toilet paper which you purchased and sold in your business?

A. A ten-cent package of medicated toilet paper, oval roll.

Q. 6. At how early a date did you first receive any of these ten-cent oval rolls of medicated toilet paper?

A. March 9th, 1885.

Q. 7. Have you any such rolls as you then received?

A. Not of those identical rolls.

Q. 8. What did you do with them?

A. I sold them.

Q. 9. About how many of them were first received?

A. At least one hundred packages.

Q. 10. Have you continued to receive the same shape and size of these oval ten-cent medicated rolls; if so, at how frequent intervals?

A. I have had many invoices down to last night.

Q. 11. Will you produce a ten-cent oval medicated roll similar in all respects to those you received as early as March, 1885?

A. This is like those I have sold as early as March, 1885. (Witness referring to roll Defendants' Exhibit No. 25.) The roll has never been changed in any respect since.

Cross-examination waived.

H. B. SMITH.

Subscribed and sworn to before me this 17th day of July, 1888.

ANDREW M. TODD,

[L. S.] *Notary Public, N. Y. Co., Special Examiner.*

Adjourned to 2 o'clock p. m.

308 NEW YORK, *July* 17, 1888—2 o'clock p. m.

Met pursuant to adjournment.
Present: Counsel as before.

HENRY L. BREVOORT, another witness produced on behalf of the defendants, being duly sworn, deposes and says in answer to questions propounded to him by A. J. TODD, Esq., counsel for defendants, as follows:

Q. 1. What is your name, age, residence and profession?

A. My name is Henry L. Brevoort; I reside in Brooklyn, New York; I am 39 years of age, and I am by profession an engineer.

Q. 2. What, if any, experience have you had in the examination of mechanisms, whether patented or not patented, and in the giving of opinions as to their similarity and difference?

A. I learnt the trade of a machinist when I was a boy, and for some years was engaged in mechanical work, such as designing, testing and constructing machinery of various kinds. For the last 15 or 16 years I have been almost exclusively occupied in examining patents and patented devices, and I have during this period been called upon to testify as an expert mechanical witness in many hundreds of suits, some in the State courts, but the majority in the circuit courts of the United States.

Q. 3. Have you examined the letters patent granted to Oliver Hewlett Hicks, namely, No. 325,410 for package of toilet paper, and Nos. 325,174 and 357,993 for toilet-paper fixtures, and if so, do you understand the specifications and claims thereof?

309 A. I have frequently examined the patents enquired about in the question, and I think that I understand that which is shown, described and claimed in the said patents.

Q. 4. Will you please compare with the patent on toilet-paper fixture, No. 325,174, the oval rolls of toilet paper, Defendants' Exhibits Nos. 17, 18, 21, 23 and 25, also Defendants' Exhibits Nos. 2, 3 and 4, and state whether you find in the construction of said rolls the invention described and claimed in said patent No. 325,410, and give any reasons you may have for the conclusions you arrive at.

A. In making the comparisons called for in the question I will first briefly consider what is set forth in the patent of Hicks, No. 325,410. The specification sets out by stating that certain forms of packages of toilet paper are old and were in use before the invention of Hicks. The patent then goes on and recites that the object of the present invention is to save paper, and that the invention is carried out by forming a continuous band of paper of oblong or oval shape, the band or package so formed necessarily having at each end a sharply rounded or bent portion, "the ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper." Further along in the specification I find a clear and distinct limitation is put upon

the proportions certain parts of the roll of paper are to bear to certain other parts of the roll. Thus the specification says: "I make the internal diameter of the band when in cylindrical form of not less than twice the thickness of the band at any one point, and the proportions which I prefer to employ are as follows." It is unnecessary to consider the size of the bundle which the inventor prefers to employ, as the mere preference for one size or the other size
310 is in no sense a binding qualification of the invention specified in the claim, but is indicative merely of the preferred but not the only size of roll which will come within the scope of the invention sought to be protected by the patent.

The specification goes on then to recite that the oblong or oval bundle of paper is adapted for use with a fixture described in a certain application then pending, or that the bundle may be used when slipped over the fingers of one hand, the free end of the strip being pulled by the other hand, the paper separating where the bundle is bent sharply at one of its ends. The patent says that it is obvious that when one sheet has been removed "the end of the portion which is to form the next succeeding one will automatically descend into convenient position to be grasped."

This does not seem particularly obvious, as it depends upon the position of the left hand of the user and the position of the severed end.

The true statement would be that it is obvious that the end could be caused to descend so that it could be grasped.

I will quote the claim to save turning to the patent while reading the deposition. There is but one claim and it reads as follows: "A bundle of paper consisting of one or more lengths formed into a continuous band, whose internal diameter is greater than the thickness of the paper, substantially as described."

Two things will be noticed when the claim is read with care: one is that the claim makes no reference to the oval form of the bundle and the other is that the only limitation in the claim is to the proportion between the thickness of the paper and the size of the internal opening.

The claim specifies, as I understand from the patent, that the internal diameter of the roll is greater than the thickness of the paper—that is, greater than the thickness of twice the band
311 at any one point. This statement in the claim must be read in connection with the statement in the specification where it says in the second column, beginning at line 64, that the internal diameter of the band when in cylindrical form is to be not less, that is, equal to or more than twice the thickness of the band at any one point, and this is probably what the terms of the claim refer to.

Comparing this invention with the exhibits to which my attention is called, I find that these exhibits, referring especially to Nos. 17, 18, 21, 23 and 25, all consist of bands of paper formed of one or more lengths; they are continuous and have an internal diameter, when in circular form, as great as or greater than double the thickness of the paper composing the band at any one point, and

therefore I think that these bundles of paper contain the invention specified in the claim of the patent enquired about.

It is to be observed that each one of these bundles are in oval form, having two ends where the paper is sharply bent, and that they conform each of them to the specified proportions set forth in the patent and referred to in the claim.

I am aware of the fact that each of these bundles is smaller than the specification says is the preferred size, but this I do not understand makes a material difference, as the claim is in no way limited to a particular size, which the patentee merely "prefers."

The words at the end of the claim, "substantially as described," do in my judgment limit the invention to an oval roll because this form of roll is described as essential in producing the desired result, but the same result can be obtained by the use of a larger or a smaller roll than the one which is merely preferred by the patentee.

It will be obvious from a reading of the specification that
312 the patentee has carefully avoided limiting himself to a particular size of roll, because such limitation would necessarily have made his patent valueless, and the only limitation which he has seen fit to impose is on a proportion between parts of the roll, which proportion can exist in rolls of varying size, and these proportions are found in the exhibits I have referred to, and also in the Exhibits Nos. 2, 3 and 4.

In conclusion I may state that each of the exhibits to which my attention has been called do in my judgment show the invention specified in the single claim of patent No. 325,410.

So much of the above answer as attempts to construe the claim of the Hicks roll patent is objected to as incompetent.

Q. 5. Will you please compare with the toilet fixture patents the first fixture patent, No. 325,174, and the second fixture patent, No. 357,993, the model Complainant's Exhibit Y, illustrative of the operation of Exhibits D and E, and state whether you find in said model the invention described in either of said fixture patents, and please give the reasons for any conclusions you may arrive at?

A. I have made the comparison called for in the question. I do not think the exhibits themselves or Complainant's Exhibit Y, which illustrates the paper and the fixtures together, do contain any of the inventions specified in either of the fixture patents referred to.

One of the fixture patents, to wit, 325,174, has five claims, and each one of these claims involves a cutting mechanism, along the edge of which the sheet is severed.

Now the defendants' fixture has no cutter or knife, and I believe it is not even claimed by the complainants that such a feature exists in Exhibit Y, and consequently it is unnecessary to
313 consider at length this patent in connection with Exhibit Y, as it is evident that the inventions specified therein are limited in each claim to a knife or cutter, which is a device not found in the said Exhibit Y.

I understand, however, that the complainants contend that the first, second, third and fifth claims of fixture patent 357,993 are

contained in Complainant'- Exhibit Y, representing the actual Exhibits D and E.

To make the comparison intelligently I will first consider that which is shown and described in patent No. 357,993.

This patent shows an oval roll of paper held upon a plate or spreader, and the latter is so journaled in fixed arms that the roll of paper or band of paper is automatically brought to rest after a sheet has been removed from it in a certain predetermined position, leaving a pendant or free end visible below the mass of paper.

When this free end is grasped and pulled by the user the roll is oscillated until it is stopped, and in the case of figures 1 to 5 of the patent, inclusive, this stop always acts as a knife to enable the paper to be severed by the pull of the user at a point upon the flat side of the flattened roll, while in figure 6 the stop and the knife are separate, the roll of paper is cylindrical and the severing of the paper is accomplished on the periphery of the cylinder.

I think I best can indicate the nature of the invention by quoting here and there from the patent itself:

"The object of my invention is to so arrange the paper as to prevent more than a given quantity of it from being withdrawn from the roll at a single operation, and so that in the act of withdrawing such given quantity it shall be automatically severed from the roll, leaving pendant from the roll a free end, which shall serve as a means for withdrawing a like given quantity by the next user."

314 The above quotation from the patent indicates clearly two things: one is, that a given quantity of paper is to be withdrawn at a single operation and that the piece removed is to be severed from the remaining portion.

Further along in the specification I find the following statement: "With a roll hung in the manner described the operation of unwinding and severing paper from it is as follows: * * * As soon as this arrest of the motion takes place the depending portion of the paper becomes drawn tightly over the edge of the plate M, and can be severed at that point either by a continued pull on the paper or by a lateral tearing motion."

Further on in the specification an important statement is made, which I will also quote: "It will be observed that the plate M performs the function of a stop for arresting the forward rotation of the roll, and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper; and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll."

Now, in all figures, except figure 6, the stop and the knife are one and a single piece, and the stop is so arranged and so located in relation to the roll that it must act as a cutter, and in figure 6, where the stop is shown as separate from the cutter a special cutting mechanism is introducing in the drawing.

There is not a word in the specification of this patent, or the

drawing, that teaches any one reading it that the pieces of paper can be severed from the roll without the use of a cutter. In
315 no case is a stop shown without either being used as a cutter itself, or without being used in connection with a cutter, and no one would be taught from the patent how to construct a fixture that did not employ a cutter, and, as a matter of fact, the cutter operates in all cases to sever the paper at a point where its severance would be impossible unless a cutter was employed. Consequently, it seems to me, that if the claims refer to a stop, as they do, the functions of the stop cannot be separated from the functions of the cutter, as the patent does not teach the person reading it how to make a fixture in which a stop alone is used without being combined with a cutter.

The modification shown in figure 6 is an acknowledgment of this position, for in this figure a stop is shown which does not in and of itself, act as a cutter; but in the same figure the paper is shown as bent over the edge of a cutter, thus emphasizing the fact that a stop alone was not deemed sufficient to insure the objects of the invention being carried into effect.

The specification says that the pull on the free end of the paper "must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll," and this point in the various figures is never in the tangential line, but is always predetermined by the flexing of the paper over the cutter; thus the severed portion is never torn from the roll by a direct tangential pull, but is always separated from the roll by a flexing of the paper over the edge of the cutter.

Adjourned to July 18th, 1888, at eleven o'clock a. m.

316 NEW YORK, *July 18th*, 1888.

Met pursuant to adjournment.
Present: Counsel as before.

Witness continues:

The bundle of paper referred to in the patent is to be, I understand, from that instrument, one without perforations, or, in other words, it is to be a continuous roll, from which, as the patent puts it, pieces can be severed, and which pieces shall be of a length fixed by the circumference of the roll.

The words of the patent, in this regard *is* as follows: "From the preceding description it is clear that only a limited amount of paper can be removed from the roll at any one operation, and that the circumference of the roll fixes the limit of length of the portion detached."

I will now pass over the claims and refer to Exhibit Y, which illustrates the devices said to contain certain of the inventions specified in some of the claims of this patent in suit.

The alleged infringing device consists of two arms, carrying between them an oval roll of paper upon a spreader or core plate, pivoted to the arms in line with one of its edges.

The oval roll of paper is perforated at even intervals, and, by gravity, hangs downward and rests against the wall to which the fixture is attached.

If the exposed end of the paper is pulled the roll turns upwards, hits the top of the fixture, and a further pull breaks the paper on one of the lines of perforation, and then the roll drops backwards against the wall, and the cut end of the paper may or may not be left pendant, this depending upon chance.

317 The pieces of paper removed may consist of pieces bounded by two lines of perforations, or the piece may be double this size, and include a perforated but untorn line. Thus a person may obtain a piece six or twelve inches long, and the user never knows whether he is going to get a big piece or a little piece, this matter depending entirely on chance; in fact, depending on whether one or two rows of perforations are left below the top of the roll when the roll is turned upward.

The paper, however, invariably breaks upon the weak lines where the perforations are, and the size of the sheets obtained are determined by the perforations.

Comparing this with the patented structure, the following distinctions are to be noted.

In the patented structure the roll is an unperforated one, and the lengths of the sheets removed is fixed by the circumference of the roll, while in the defendants' structure the length of the sheets depends upon the perforations.

In the patented structure the stop is either itself the cutting edge, or it is combined with a cutting edge, so that the stoppage of the rotation of the roll is accompanied by the flexing of the paper over an edge, across which it can be torn.

No such stop is found in the defendants' device, and no cutting operation of the paper takes place where the paper is stopped.

It is true that in Exhibit Y the rotation of the roll is prevented by the top of the fixture, but the paper is not bent over this stop, and the length of the sheet does not depend upon the stoppage of the roll, and the removal of a piece of paper as long as the circumference of the roll, and measured between two succeeding points of stoppage upon its periphery; but, on the other hand, in the defendants' contrivance the stoppage of the roll merely enables the

318 paper to be torn upon a previously perforated line, and the stopping of the roll bears no fixed relation to the length of sheet obtained when the paper is pulled.

Referring to the claims of the patent, the first, second, third and fifth claims are, I understand, said to be infringed.

Now each one of these claims refers to a stop for arresting the roll at the limit of its motion, and this stop, as I have before at length explained, either consists of both a stop and a knife, or else the stop is combined with a knife.

Now there is no stop in the defendants' device which acts as a knife, or which co-operates with a knife, and there is no tearing of the paper over an edge when the rotation of the roll is prevented; but, on the other hand the paper is torn off in pieces of varying size

on previously weakened lines, to wit, the lines of perforations, and which lines of perforations bear no relation whatsoever to the portion of the fixture which stops its rotation, or to the ends, that is, the sharply curved portion of the oval roll, the lines of perforation appearing as the paper is unreeled first in one place and then in another place, giving sheets of unequal size, and without any relation to the length of the circumference of the roll.

With the defendants' device the same sheets of paper cannot be obtained, as are obtainable with the patented device, to wit, sheets limited in length by the circumference of the roll, neither with the patented device can the sheets of the defendants' device be obtained, for the sheets resulting from the use of the patented device always bear a fixed relation to the circumference of the roll, while the sheets of the defendants' device bear no relation to the circumference of the roll, but are of one or two lengths, predetermined by the perforations, and depending upon chance as to which length will be obtained when the paper is pulled.

319 Neither has the defendants' device the oscillating roll of toilet paper referred to in the first, second and third claims, for the roll of toilet paper referred to in the patent must necessarily be an unperforated roll, or one which does not possess lines of weakness across its width, for if such lines were present and arranged without regard to the sharply bent ends of the roll the piece of paper obtained would depend for its length upon whether the paper was stronger at such lines than the strength required to tear it across the knife, thus to reach the results described in the patents an unperforated roll must be used and such a roll is referred to as I understand it in the claims which I have specified.

I may say further that the patent does not teach any one how to make a paper fixture like Defendants' Exhibit Y, for it must be borne in mind that the patent nowhere broadly describes and claims a roll of toilet paper of any kind oscillated in any way to obtain any length of sheet, but the patent is specific, the parts are to co-operate in a certain way to produce a certain result and nothing else.

Q. 6. Is Hicks the first man to give to the public a toilet-paper fixture, which fixture will deliver sheets of a predetermined length? In answering this question, you are at liberty to refer to the state of the art as introduced in this case.

A. The patent of Johnson, No. 302,735, describes a toilet-paper fixture, in which a roll of paper is placed, which roll of paper is unperforated, and which roll is delivered over a cylinder under certain guide-bars, and then over a knife. The cylinder is stopped once in each revolution and this stops the delivery of the paper, a further pull upon which causes the paper to be torn over a knife, and thus from beginning to end of the operation, sheets of an even length result. Therefore, Hicks was not the first one to de-

320 liver from an unperforated roll of toilet paper sheets of an even length. As a matter of fact the Hicks device does not deliver sheets of an even length, but only of an approximately even length, or of a length which is dependent entirely on the

length of the circumference of the roll of paper, and this is a feature of the Hicks fixture, which is not found in the Johnson patent or in the Defendants' Exhibit Y, for in both of these latter devices, the circumference of the roll has nothing to do with the length of sheet obtained.

Adjourned to 2 p. m.

NEW YORK, *July* 18, 1888—2 o'clock p. m.

Met pursuant to adjournment.
Present: Counsel as before.

Q. 7. Does the roll, Complainant's Exhibit Defendants' Roll E, which is the roll upon Complainant's Exhibit Y, model, come within the preferred proportions mentioned in the fixture patents, Nos. 325,410 and 357,993? If not, state what is the practical effect of the use of said roll E on the Universal fixture, assuming that the convolutions were taken off the roll substantially as stated in said fixture patents?

A. The preferred roll of the patent is to have an interior diameter of say two inches and three-quarters, and an exterior diameter of about five inches; these measurements are made when the roll is in circular form. Now Complainant's Exhibit E, being the defendant's roll as shown on Exhibit Y when in circular form, has an internal diameter of about one and three-quarter- inches and an external diameter of about three and three-quarter- inches,
321 which is a vast deviation from the preferred form set forth in the fixture patent, and if Complainant's Exhibit E, the defendants' roll, were used as is the roll in the fixture patent, the result would be that the first sheets would be about twelve inches long and the last sheets would be only about four and a half inches long, but as a matter of fact the roll is perforated and is not used as is the roll in the fixture patent, and the resulting sheets due to tearing the paper on the lines of perforation give sheets of either six or twelve inches in length, the twelve-inch sheets having a row of untorn perforations in the middle. Such sheets are accidental and due to the winding of the strip into a roll.

Q. 8. Could sheets of a sufficient length be taken off of rolls like Exhibits 17, 18, 25, 3 and 4 when used by hand which could be torn off the short ends and be folded double and be of practical use, all as set forth in complainant's package patent, No. 325,410?

A. Yes. It simply depends on how long the person wishes the sheet and how many convolutions he removes therefrom. With a small roll he would remove more convolutions than with a large roll.

Q. 9. Will you please refer to Henry A. Chapin's testimony, complainant's expert, at pages 108 and 109, Complainant's Record, at his answer to question 35, and state whether you find any such construction described in the specifications of either of his said fixture patents or illustrated in the drawings thereof, or any construction or mode of operation substantially the same.

A. Mr. Chapin describes this. He introduces stops, so that the

roll never comes in contact with what I might call the cutting stops of the fixture patent, and then he proceeds to obtain sheets by tearing the paper across the sharply bent ends of the roll. No such operation is described or shown in either of the fixture patents, and so far as these patents go, what Mr. Chapin did was some-
322 thing entirely outside of either of the patents, neither of which gives any hint of the possibility of what Mr. Chapin did, and what he did is not described in either of the patents.

Q. 10. Will you please refer to the Peacock patent, Defendants' Exhibit No. 16, and the model, Defendants' Exhibit, Peacock Roll, No. 21, and state first whether said model is made in accordance with the oval roll of said patent. Second, whether it has an internal diameter when in cylindrical form of at least equal to, if not greater than, twice the thickness of the band at any one point, and state how you find your measurements to compare with those given by Seth Wheeler in his deposition for defendants in his answer to question 63 and X question 116.

A. The model is correct, the internal diameter when the roll is cylindrical is as great as or slightly greater than double the thickness of the band at any one point, and I find the measurements that Mr. Wheeler made and which he refers to in his deposition at the places specified in the question are substantially correct.

Cross-examination *de bene esse* by MELVILLE CHURCH, Esq., counsel for complainants:

X Q. 11. Do you not understand from a reading of the Hicks oval-roll patent, No. 325,410, that it was the intention of the patentee to produce an oval roll of paper from which successive sheets could be detached, representing each one convolution of the roll and of a size practicable for use, and involving a minimum amount of wastage?

A. So far as the successive sheets, each representing one convolution, are concerned, and of practical length or convenient length, this seems to me to have been a matter of preference on the part of the inventor, while the proportion of the thickness of the
323 band and the diameter of the internal opening were matters that he placed positive limitations upon.

I do not think that the saving of paper would amount to anything unless the roll was combined with a fixture, for if the roll, Fig. 1, of the patent was left in a water-closet no man would think of using it as shown in the patent unless he had been instructed by the patent, and thus there would not have been a saving of paper.

X Q. 12. Is it not quite clear that the patentee designed to produce an oval roll of paper from which successive sheets, each representing one convolution, was to be withdrawn? I say, does that not appear from a reading of the whole specification to have been his intention?

A. Yes, as to his preferred form of roll.

X Q. 13. Is there anything said in the patent about a roll from which sheets representing more that one convolution are to be detached?

A. The patent states: "The short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper." It will be noticed that both of the rounded ends are mentioned as tearing surfaces. Now I cannot tell from this language whether the inventor proposes to tear sheets equivalent to half the circumference of the bundle or one and a half times the circumference of the bundle, for he speaks all through of using both of the rounded ends to tear from or over. Now, if he proposes to tear sheets of always one convolution in length, he would not have spoken of tearing over both ends of the bundle, for when the bundle is on the hand and sheets of one convolution are desired but one end of the bundle would be used as a tearing surface.

324 X Q. 14. Admitting for the purposes of argument that the meaning of the portion of the specification that you have quoted is not clear, do you not think that, in view of the statement at the end of the specification in regard to the automatic dropping of the end of paper when one sheet is torn off, and of the importance of preventing, by the use of adherent substance between the convolutions, this automatic dropping of the free end, and of the illustration of the manner in which the paper is to be removed from the roll afforded by Fig. 1, and of the reference to the use of the roll in connection with his fixture, application filed February 7, 1885, the ambiguity of the statement which you have quoted is cleared up, and it clearly appears that he only designed to produce a roll from which sheets each representing one convolution were to be detached? In giving your answer I would like to have you consider the utility or inutility of bothering about the relation of the internal to the external diameter of the paper band, so carefully considered by the patentee, if more than one convolution were designed to be removed from the roll to form a sheet?

A. I think if a person had seen the fixture patent he would not have been in doubt, but the other considerations referred to in the question do not to my mind remove the ambiguity. The patent does not state what Mr. Hicks thought was a convenient length for a sheet; in saying that the fixture patent is infringed he says in effect that a sheet of five or six inches is a useful sheet, and by tearing from the outside of a roll having the proportions of Mr. Hicks' roll in his roll patent and also of his preferred size, I find that I get sheets of between six and seven inches average length, tearing from both ends, which is considered a convenient length for sheets in the fixture patent, so far as this suit shows.

325 X Q. 15. While it may not be clear, we will assume that Mr. Hicks did not intend under any circumstances to take off more than one convolution at a time from his roll to form a sheet, it is clear, is it not, that he did certainly contemplate taking off one convolution at a time to form a sheet?

A. No, it is not clear that he meant to take off a single convolution for a single sheet, for, from the language he used, he speaks of

tearing from both ends, and this would give a sheet equal to half a convolution.

X Q. 16. Do you understand what Mr. Hicks means by his description of the automatic dropping of the free end of the paper, when he detaches a sheet?

A. I do.

X Q. 17. Please explain your understanding.

A. He may have meant what I now illustrate, the dropping away of the paper from the roll when a half convolution was torn from the bottom bend, or he may have referred to the dropping down of half a convolution when the sheet is torn from the upper bend; in both cases a pendant end is left hanging for the operator to grasp. In one case the pendant end hangs below the roll; in the other case it hangs beside the roll.

X Q. 18. In Fig. 1, in his patent, he shows the pendant end hanging below the roll, does he not?

A. Yes, and he shows the operator as tearing off a whole convolution.

X Q. 19. It is clear then that whether or not he did contemplate the other assumed mode of operation, that he did at least undoubtedly contemplate the removal of sheets representing whole convolutions?

A. Yes, so far as Fig. 1 goes; it shows a whole convolution being removed from a roll, which I suppose is intended to represent a roll of his preferred size.

326 X Q. 20. In your answer to your fourth question you have stated that the words "substantially as described," at the end of the claim of the Hicks roll patent, in your judgment "limit the invention to an oval roll, because this form of roll is described as essential in producing the desired result." I now ask you if the only construction of roll that is clearly and indubitably described in the specification is not only an oval roll, but an oval roll like that shown in Fig. 1, so proportioned that a single convolution is intended to be removed at a time to produce a sheet, whether the claim by its words "substantially as described" might not properly be limited to that kind of roll?

A. I do not think that the words limit the invention to a construction said to be in the specification merely preferred. The specification of the fixture patent says that a certain size of roll is preferred, but that size of roll is not in the defendants' apparatus, and still the complainants have not limited the fixture patent in the same way that they now seek to limit the roll patent, No. 325,410, to which I now refer.

X Q. 21. Having reference to the fixture and roll of the defendants' embodied in Exhibit Y, I desire to ask you if when the free end of the paper on that fixture is pulled the said roll is not oscillated, and if a stop to it, the fixture or the roll, or both, does not operate to arrest the roll at the limit of its motion, so that the portion of paper unwound by the pulling operation may be removed by continuing the pull?

A. Yes, but all the paper unwound is not removed, but it is removed to the upper perforated line, wherever that may fall.

X Q. 22. I notice that the roll now in Exhibit Y is so far used up as to produce an external convolution of not over seven inches. Have you ever experimented with a full roll of paper, such
327 as Exhibit E on the fixture of Exhibit Y, with a view to determining whether or not the paper by a pull upon the free end could be separated at any point save at a line of perforation?

A. The present roll that is upon Exhibit Y was almost as large as roll Exhibit E when I began to experiment with it, and in the course of these experiments the roll has been brought to its present reduced size. I should judge from these experiments that it was extremely difficult to break the paper on other than the perforated line, and that any breaking other than upon the perforated lines was merely accidental and exceedingly infrequent.

X Q. 23. Assuming that the paper such as Exhibit E when used upon the fixture like Exhibit Y would oscillate when pulled would encounter a stop and be arrested and would separate always at a line of perforations, would not the racing of the roll be prevented, and one of the evils sought to be remedied by the Hicks construction be obviated?

A. Yes, but not by the Hicks method, as there described and claimed as I understand it.

X Q. 24. Do you mean that it differs from the Hicks method, because the sheet of paper is separated at a different point?

A. I mean that it differs from the Hicks method in this: In the Hicks patent a person is merely taught how to sever a continuous roll into sheets, having a length of the circumference of the roll by bringing the roll in contact with a cutting stop, or with a stop and cutter combined, but not in one piece, while in the defendants' method no such stop exists, no sheets are cut, each of the length of the circumference of the roll and the sheets are torn apart on previously weakened lines, and are not of the same or even approximately the same lengths; some sheets being double the length of others.

328 X Q. 25. Would in your judgment the Exhibit Y embody the Hicks invention if there were no perforations in the paper?

A. No, because there would be no cutting stop.

26 X Q. And you hold then that there must be a *a* cutting stop in a device in order that it may embody the Hicks invention of either the Hicks fixture patents, although the later patent expressly excludes the cutting function from the claims.

A. Yes. The later patent neither shows or describes any device or method in which the cutter is not used, and it is not stated in the patent that it may be omitted, and to make the device work without the cutter is a feat not taught by the patent.

HENRY L. BREVOORT.

Subscribed and sworn to before me this 18th day of July, 1888.

ANDREW M. TODD,

[L. S.] *Notary Public, N. Y. Co., Special Examiner.*

Indorsed: Filed Mar. 8, 1890. W. S. Doolittle, clerk.

329 SPRINGFIELD, MASS., *Dec.* 28, 1888.

HENRY B. RICHARDSON, a witness produced on part of defendants, being duly sworn, in answer to the interrogatories propounded to him by A. J. TODD, Esq., testifies as follows:

Q. 1. What is your name, age, occupation and residence?

A. My name is Henry B. Richardson, age 44, occupation professor of German at Amherst college, residence Amherst, Mass.

Q. 2. You made an application for a patent on toilet paper and fixtures as early as September 28, 1885, did you not?

A. I don't recall the date.

Q. —. When were you in Europe; 1885?

Objected to as leading.

A. During the summer vacation. Approximately 1st of July to 5th of September.

Q. 4. Was that application made before you went or after your return?

A. I can't tell, sir.

Q. 5. Please look at the papers now shown you, and, after examining them, state whether they are copies of the specifications and drawings which you had prepared, signed and sworn to, for filing in the U. S. Patent Office on the application for the patent on that oval roll and fixture.

Objected to as leading.

A. I believe them to be such.

Papers are marked Defendants' Exhibit Richardson's Specification and Drawing, and offered in evidence.

330 Objected to as being secondary evidence.

Defendants' counsel states that he will produce certified copies from the Patent Office if the objection is insisted on.

Q. 6. There was an interference declared between this application for a patent which you so made and the applications of Oliver H. Hicks and Charles C. Johnson, in which interference you made a sworn preliminary statement. I now hand you a paper, and ask if you signed a statement of which this is a copy.

Objected to as leading and as assuming what has not been proved.

A. I signed a statement, but cannot testify from memory as to the wording of it.

Q. 7. Please examine the wording of this copy and state whether you have any doubt about its being the copy of what you then swore to on that preliminary interference statement?

A. I have no reason to doubt that it is the statement, except that I do not recall from memory the wording of it.

Q. 8. In this statement it appears that you swore to it before H. A. Chapin, notary public, on the 14th of November, 1885. Now,

does not this refresh your memory of having made the application for the patent prior to that date, and if so, about how long prior?

A. I think I did, but I cannot recall how long.

Paper shown the witness is offered in evidence as Defendants' Exhibit Richardson's Preliminary Statement in Interference Case with Hicks and Johnson.

Objected to as not being the best evidence.

331 Defendants' counsel makes same offer as to producing certified copies hereafter.

Q. 9. You testified in that preliminary statement that you made the invention; that you conceived of the invention shown in the specification drawing of that application as early as December 15, 1883. Have you now any reason to doubt the correctness of that statement?

A. If I made oath to such statement it must have been my recollection of the matter at that time; but, independently of that, I cannot now recall the dates.

Q. 10. Then if it was your recollection at that time, such recollection was correct, was it not?

A. I have no reason to doubt it.

Q. 11. Do you make the same answer relative to your statement of having reduced the invention to a model in the latter part of this same month, and of having completed it in the following month, namely, January, 1884, as set forth in said preliminary affidavit?

A. I do.

Q. 12. What kind of paper did you use in that oval roll attached to said model fixture?

Objected to as leading.

A. It was paper taken from some kind of roll toilet paper.

Q. 13. Was it unperforated paper or perforated rolls that you so obtained?

A. I used some of both.

Q. 14. How did you make the line of perforations in the oval roll run entirely through the roll at the portion marked Z Z on the drawing?

A. With a narrow flat chisel.

Q. 15. What was the center piece or former marked C composed of in that model fixture?

332 A. A thin piece of wood.

Q. 16. How large were the convolutions as they were torn off the roll in the rolls which you used on that fixture?

A. I don't know the exact size. The length was arranged so that the first pieces would not be too long, and the last pieces not be too short for use.

Q. 17. When you put paper on this fixture, which had already been perforated, did you still put your line of perforation at Z Z, as shown in the drawing, after having rewound the perforated paper into an oval roll?

A. I still put them in.

Q. 18. Was that model fixture and roll constructed as shown in the drawing, Defendants' Exhibit Richardson's Drawing?

Objected to as leading.

A. I think it was.

Q. 19. Did you use that fixture, when made, in a water-closet with the oval roll on it?

Same objection.

A. I did.

Q. 20. How long did you use it there?

A. I don't recall exactly how long.

Q. 21. Did you test it in the closet as soon as it was completed, with the oval roll upon it?

Objected to as leading and assuming.

A. I think I did.

Q. 22. What finally became of that fixture?

A. As near as I can recollect it was taken down, and the different pieces were knocking about the house for some time, and finally lost sight of.

333 Q. 23. Don't you remember having taken it to your patent attorney, H. A. Chapin, for the purpose of having your application papers and drawings made from it?

Objected to as leading.

A. I think I took him the center board.

Q. 24. Did that fixture and roll operate well while in your water-closet?

Objected to as leading.

A. It did.

Q. 25. Where was this water-closet in which this fixture was used, in your residence or in the college?

Same objection.

A. In my house.

Q. 26. Whom did you show your invention to, as you stated in your preliminary statement, "to others"?

A. Members of my family.

Q. 27. Did outsiders see it also?

Objected to as leading.

A. I don't recall.

Q. 28. What did you finally do with the application for a patent?

A. I sold it.

Q. 29. To whom did you sell it?

A. Disposed of it through Mr. Chapin.

Q. 30. Was it not disposed of through Mr. Chapin, to the complainant in this suit, The Morgan Envelope Company?

A. I believe it was.

Q. 31. Did you assign it directly to the company, or to Mr. Chapin for him to assign?

334 A. I believe I assigned it to Mr. Chapin.

Q. 32. Was this assignment made to Mr. Chapin before the application was made or afterwards?

A. I think it was made before.

Q. 33. Is this the Mr. Chapin who is here present to whom you so assigned it?

A. Yes, sir.

Cross examination by MELVILLE CHURCH, counsel for complainants:

X Q. 34. Did you not have knowledge prior to your application for patent that some one else had been putting up toilet paper in oval-roll form; if so, how did you obtain such knowledge?

Objected to as immaterial.

A. I don't recall having such knowledge.

X Q. 35. You had seen, had you not, an oval roll of toilet paper not made by you, prior to the time when you made your application for patent?

Same objection.

A. I have an indistinct recollection of seeing something similar in Mr. Chapin's office, but knew nothing of it or about it.

X Q. 36. But the seeing of it in Mr. Chapin's office recalled what you had previously done in the same direction, did it not?

Objected to as assuming what the witness has not stated and as misleading and indefinite.

A. I think it did. From the fact that it bore some similarity to my own device.

335 X Q. 37. If I understand you, this roll and fixture, which you testify were made by you, were tried by you in the bathroom of your private house. Am I right in this?

A. Yes.

X Q. 38. And that after having been tried the parts were lost or destroyed except the board on which the roll was wound? Am I right in this?

Objected to as not being a correct statement of what the witness testified to, as the witness testified that it was used there, but he could not recall exactly how long; that it was taken down, that the different pieces were about the house and finally lost sight of. (Answers 20 and 21.) And as a bald attempt to try to get the witness to contradict himself.

A. That is my recollection of it.

X Q. 39. And this trial or test or use, or whatever it may be

pleased to be termed, and subsequent dismemberment of the apparatus occurred before you applied for a patent?

A. It did.

X Q. 40. How much paper did you probably put up in oval-roll form and use on this fixture, which you say you made?

A. As near as I can recollect not more than two rolls.

X Q. 41. How much did you receive for your application for a patent?

A. Fifty dollars.

Redirect examination:

R. D. Q. 42. Having reference in your answer to X Q. 35, you mean, do you not, that when you went to Mr. Chapin's office
336 to get him to draw your application, that you there saw or he showed you some other person's oval roll?

Objected to as leading.

A. My recollection is that it was on a visit to Mr. Chapin's office to consult with him about one of my motor patents.

R. D. Q. 43. When was this that you so went to Mr. Chapin's office to so consult with him about your motor patents? Before or after you made this application for the fixture and oval roll?

A. I don't recall the date. I think it was before.

R. D. Q. 44. May it not have been after you made this application that he so showed you this other roll of oval paper?

A. I think it was before I went to Europe.

R. D. Q. 45. Had you not intended to make this application on this fixture and oval roll of paper before you went to Mr. Chapin's office and saw that other roll of oval paper?

Objected to as leading.

A. I can't tell that because I can't recall when I saw that roll of paper, at Chapin's.

R. D. Q. 46. When did you first learn that these other parties, Hicks and Johnson, were making applications for patents on fixtures and oval roll, which were subsequently put in interference with your application?

A. I don't remember knowing anything about it until I was summoned to testify in the interference, that is, receiving my notice of interference.

R. D. Q. 47. Did you prior to or up to the time of your having made your said application through Mr. Chapin, as attorney, know of either Hicks or Johnson or of their having made applications for toilet fixtures and oval rolls?

337 A. No, I did not.

R. D. Q. 48. When did you first know that there was such a person as Mr. Oliver H. Hicks?

A. When I received notice of the interference.

R. D. Q. 49. Did you ever meet said Hicks, who is now present, before to-day?

A. No.

R. D. Q. 50. Do you know whether the transfer or transfers of your said application for a patent were ever recorded in the U. S. Patent Office?

A. I do not.

H. B. RICHARDSON.

Subscribed and sworn to before me this 27th day of Dec, 1888.

WILLIAM O. DAY,
Notary Public.

338 Circuit Court of the United States, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER CO. and SETH WHEELER.
} In Equity. No. 5645.

Evidence for the Defendants,

Taken in pursuance to the sixty-seventh rule of the Supreme Court of the United States, in equity, as amended, by consent, before me, Stuart G. Speir, notary public and special exam'r.

Present: A. J. Todd, Esq., of counsel for defendants; J. B. Church, Esq., of counsel for complainants.

Deposition of Albert A. Maguire, a Witness Produced and Sworn in Behalf of the Defendants.

Direct examination by A. J. TODD, Esq., of counsel for defendants:

ALBANY, N. Y., *Jan.* 15, 1889.

Q. 1. State your name, age, residence and occupation.

A. Albert A. Maguire; age 41; residence, Springfield, Vermont, dealer in musical instruments and music teacher.

339 Q. 2. Did you ever stop at the Windsor house, Windsor, Vermont?

A. I have.

Q. 3. Were you ever in the water-closets of that hotel?

A. Yes.

Q. 4. Within what period did you stop at that hotel and make use of the water-closets there?

A. In the years 1883 and 1884—from the spring of '83 to November of '84; I was at the hotel generally two days every week overnight; once in a while there might be an exception.

Q. 5. When you first used the water-closets in that hotel what kind of water-closet paper, if any, was in them?

A. There was perforated paper; it was in fixtures.

Q. 6. In what form was the perforated paper in the fixtures which you saw in those closets when you first went to that hotel in the year 1883?

A. The paper when I first went there in 1883, I think was not in a cabinet, was not in a fixture; after a while they had a fixture; in the fixture it was in a round roll.

Q. 7. Did you observe that there was any change made in the form of the roll in the fixture at any time?

Question objected to as leading.

A. Yes.

Q. 8. State what was that change; describe it.

Question objected to as incompetent, in that no proper foundation has been laid for the question.

A. I noticed a flattened roll in the fixture.

Q. 9. When did you first notice the flattened roll in the fixture?

Same objection.

340 A. In the early part of the winter of 1884; that is the early part of the year 1884.

Q. 10. How long did you continue to see this flattened roll paper in the fixtures of those closets after having so first seen them in the early part of the year 1884?

A. I remember of seeing the flattened rolls through the spring and summer of 1884.

Q. 11. Did you yourself use the paper from off of these flattened rolls?

A. I did.

Q. 12. What was the difference, if any, that you discovered in so using it from off of the flattened rolls from what you found in using from off of the round rolls which you first saw in those fixtures?

A. I noticed from the round rolls the paper would tear off very easy, and from the flattened rolls not so easy.

Q. 13. Did you notice the way in which this flattened roll was retained in the fixture so as to prevent the paper from tearing off so easily?

A. When I first noticed the flattened rolls I did not. The way I came to notice how the flattened rolls hung: I am acquainted with an inventor by the name of C. C. Johnson, Springfield, Vermont. I went to see him. He showed me a fixture that he had just got up and asked me if I did not think it was very simple, and I told him that there was a fixture at the Windsor house, at Windsor, more simple than his; he asked me the next time I went to Windsor to look at it and see how the paper hung in the fixture. In a few days from that time I examined the fixtures; I found in one fixture a stick of wood and in another fixture a wad of paper, and the third fixture was mostly used up, there being nothing in it.

Q. 14. Did you inform Johnson of this the next time you
341 saw him, and if so, how soon was it after the first interview with said Johnson that you did so?

The question is objected to as being leading.

A. I informed Johnson about the paper that I examined at Wind-

sor in a few days after examining the paper. It was not a great many days from the first interview with Johnson.

Q. 15. When was it that you had these interviews with C. C. Johnson at Springfield, Vermont, and what, if anything, enables you to fix the time?

A. I had the interview with Johnson in the spring of 1884, and the day that I examined the fixtures at Windsor I went to Windsor to see Gilbert A. Davis; I had to wait for Mr. Davis, so I went over to the Windsor and examined the fixtures.

Q. 16. What was the object of your visit to Gilbert A. Davis?

A. I went to consult Mr. Davis about a case that I had coming on in the next term of court.

Q. 17. What term of court do you refer to and what court?

A. The Windsor county court, held at Woodstock the last of May or the first of June, 1884.

Q. 18. If you should see one of those fixtures and oval rolls which you so saw and used the paper out of at the Windsor house, Windsor, Vermont, in the year 1884, or one made similar thereto, do you think that you could recognize and identify it?

A. I think I could identify it.

Q. 19. Please look at the fixture and flattened roll now shown you and state how it compares or differs from those fixtures and flattened rolls which you so saw and used paper out of at the Windsor house in the year 1884.

A. I think that this looks about like it.

Q. 20. Please examine it closely and say if you discover
342 any difference between it and those fixtures which you so saw and used paper out of at the Windsor house in the year 1884?

A. It looks like the fixture that I used at the Windsor house.

Q. 21. What was in the centre of flattened rolls of paper which you used the paper off of in the fixtures in the Windsor house in the spring and summer of the year 1884?

A. In one roll there was a wad of paper, in another roll there was a flattened stick, third roll was mostly used up, and nothing in it at the time I examined it.

Q. 22. State how the stick in the exhibit which you have examined compares or differs from the stick which was in one of those flattened rolls in the Windsor house which you state you so examined.

A. The stick in the exhibit is like the stick I examined in the Windsor house, only the stick in the Windsor house was not so smooth as the one in the exhibit; the one in the exhibit is nice and smooth.

Q. 23. Is the stick in the exhibit hung in the fixture in the same or in a different way from what the stick was hung in the fixture you so *so* saw and used the paper from at the Windsor house, as you state?

A. I should say it was hung the same way.

Counsel for defendants offers in evidence the fixture and flattened

roll referred to in the 19th to 23d questions and answers as Defendants' Exhibit, Windsor House Flattened Roll and Fixture.

Q. 24. Did you ever notice a fixture and roll of paper which was hung in the office of the Windsor house?

Objected to as leading.

343 A. I noticed a roll of paper hung in the fixture in the office of the Windsor house.

Q. 25. What was the shape or form of this last-named roll referred to by you?

A. It was a flattened roll.

Q. 26. When did you see it there, and how long did it hang there?

A. It was there as long as I boarded there, between the spring of 1884 to November, 1884.

Q. 27. How did the fixture so hung in the office compare or differ from the fixtures which were hung in the water-closet of the hotel?

A. It looked to me as if the fixture in the office was about the same as the ones in the water-closets.

Q. 28. Was that fixture and flattened roll so hung in the office, so publicly exposed to view, that the guests of the hotel could see it and withdraw paper from it?

A. It was.

Q. 29. How were the fixtures which were in the water-closets of the hotel, which you so saw and used paper from in the spring and summer of the year 1884, attached to the water-closets?

A. They were fastened up to the sides.

Cross-examination by Mr. J. B. CHURCH:

X Q. 30. Who was the proprietor of the Windsor house during the years 1883 and 1884?

A. Capt. R. J. Coffey.

X Q. 31. Did Mr. Coffey claim to be the inventor of the fixtures that you saw there at that time?

Objected to as immaterial.

A. I do not know.

X Q. 32. Do you know or were you given to understand
344 who placed those fixtures in the closets referring particularly to the fixtures containing a flattened roll that you have testified to have seen during the year 1884?

A. I was given to understand they were placed there by Coffey.

X Q. 33. Who gave you to understand this and when?

A. Coffey told me about it Jan. 28th, 1886.

X Q. 34. Is that the first time that you learned who placed the fixtures or flattened rolls in the closets, and if so, state how you fixed the date as Jan. 28th, 1886?

A. On Jan. 28th, 1886, I was in Windsor, and I was just going to leave the town when a lawyer by the name of Batchelder came to

where I was boarding and said that Mr. Thompson, of Bellows Falls, wanted to see me at the Windsor house, Windsor, and Mr. Thompson and Mr. Coffey had a talk with me about the fixture. I fixed the date, that was the day, the 28th and 29th, that I was detained in Windsor; they wanted me to remain there to give my testimony, what I knew about the paper fixtures.

X Q. 35. Did you testify at that time regarding the fixture with the flattened roll, and if so, in what cause of proceeding was your testimony given?

A. I testified about the flattened rolls interference proceeding, Coffey *vs.* Hicks.

X Q. 36. Was this the interference proceeding between the applications of R. J. Coffey and O. H. Hicks for patents on the flattened roll and fixture then pending in the United States Patent Office?

A. It is.

X Q. 37. Was the testimony that you gave at that time, Jan. 28th, 1886, true and according to your recollection at the time it was given?

A. It is true.

X Q. 38. When was the last time that you saw the fixture
345 containing a flattened roll and a stick which you say was in the water-closet of the Windsor house in the year of 1884?

A. I have seen it in the last of the summer of the year 1884. I boarded there until Nov., 1884, but would not like to say when I saw it last.

X Q. 39. Was it in the water-closet when you left the Windsor house, Nov., 1884?

A. I do not know; the last few months that I boarded there I did not use the water-closet, because I could get better accommodations elsewhere. The closets were not comfortable, and then in the morning there were so many there that I did not have time to wait for them.

X Q. 40. When was the last time in the year 1884 that you were in the closets at the Windsor house; that is to say in 1884, prior to November?

A. About the last of August.

X Q. 41. Will you please describe what kind of paper rolls were on the fixtures in the closets before the flattened roll was put on, and give their dimensions if you can?

A. The rolls were round; I cannot give the exact dimensions. I should judge about the width of ordinary perforated toilet paper on rolls.

X Q. 42. Did they differ in any respect from the ordinary rolls of perforated toilet paper, such as was in common use prior to the year 1884?

A. The rolls were round and up to that time I had not seen a great many different kinds of toilet paper.

X Q. 43. Did you notice that the rolls of perforated toilet paper that you saw in the closet of the Windsor house, in the early part of the year of 1884, and before the flattened roll was put in, differed

in any respect as to form, size or dimensions from other rolls of toilet paper which you had not seen prior to that year?

A. The rolls of paper which I saw in the Windsor house were the first rolls of paper which I had ever seen in the water-closet, either with or without a fixture.

346 X Q. 44. How did the flattened rolls which you said you saw in the closets of the Windsor house in the year of 1884 differ in form, size and dimension from the round roll previously in the closets?

A. I could not say exactly; they looked to me to be about the same size of paper as the round roll.

X Q. 45 Can you state the size, shape and dimensions of the stick which you say you found in one of the flattened rolls?

A. I wouldn't like to make a statement because I never measured the stick.

X Q. 46. Did you ever see that stick; if so, when first and when last?

A. The first time that I saw a stick in the flattened rolls was in April in 1884. I have noticed a stick in the rolls in the summer of 1884.

X Q. 47. Was the stick that you noticed in the rolls in the summer of 1884, the same one that you saw in April of that year?

A. In April, 1884, I took the roll of paper out of the fixture and examined the stick; since then, during the summer, I noticed a stick in the roll—but couldn't say it was the same stick.

X Q. 48. How was the roll held in the fixture at the time you examined the stick?

A. I should say it was held in the same way as it is held in Exhibit Windsor House Roll and Fixture.

X Q. 49. Without referring to the exhibit please describe the way the roll was held in that fixture at the Windsor house in April, 1884, at the time you say you took the roll out to examine the stick.

A. There was a flattened roll and it slipped into a plain fixture, and through the roll there was a little rod with a stick under it, and the top of this stick was cut out a little bit, to let the rod set in; the stick was kind of rough, as it had been cut out with a jack-knife.

347 X Q. 50. How was the rod held in the fixture?

A. There is two little arms in the fixture and those arms hold the rod.

X Q. 51. How did you get the roll out of the fixture at the time you examined the stick?

A. The roll came out very hard, and I can't say just how it got out, but I got it out when I examined the stick.

X Q. 52. Did you take the roll off the fixture before taking the stick out, or did you take the stick out first?

A. It is so long ago that I don't remember what I did do with it.

X Q. 53. Did you know at that time what the stick was put in the roll for, and if so, who told you?

A. I did not know what the stick was put in the roll for.

X Q. 54. Did you ever see during the year 1884 more than the one fixture with a flattened roll and stick in it?

A. I noticed more than one fixture with a flattened roll. I noticed only one fixture with a flattened roll with a stick in.

X Q. 55. How many flattened rolls did you see at the Windsor house during the year 1884?

A. I saw one flattened roll in the office, and there are three water-closets upstairs, and in those water-closets were flattened rolls.

X Q. 56. With the exception that they were flattened did any of the rolls referred to in your last answer, differ in size or dimensions from the round rolls of perforated paper which you have stated were in the closets prior to the flattened roll?

A. They looked to me as if they might be the same size.

X Q. 57. After you had examined the stick in April, 1884, what report or description of the fixture did you make to Mr. C. C. Johnson, Springfield, Vt.?

348 A. I told him that the rolls were flattened, and there was a stick running through the roll and advised him to go and see it.

X Q. 58. Is that all of the description that you gave him?

A. We had conversation more than an hour, and I wouldn't like to swear to what I told him four years ago, it wasn't a thing I was interested in.

X Q. 59. I wish you would state as fully as you are able the substance of that conversation with Mr. Johnson concerning the roll with the stick in it which you say you had examined at the Windsor house in April, 1884.

A. After I examined the flattened roll at the Windsor house, in a few days after I reported to Johnson. I told how there was a flattened roll hung on a fixture and a flattened stick through the roll, and how it worked; that when you pulled the end, you could only pull off a small piece of paper. Then Johnson showed me several fixtures that he had hanging on his wall in his work-room, and he asked me if it was anything more simple than he had; I told him it was, and I either advised him to go up and see it, or he said he would go and see it.

X Q. 60. Did Mr. Johnson, at that time, say anything about patenting his fixtures?

Objected to as immaterial.

A. I understood him to say he was going to.

X Q. 61. Did you make but one visit to Mr. Davis in Windsor in the year 1884?

A. I did make more than one.

X Q. 62. Was there anything in the centre flattened roll, which you say you examined in 1884, beside the stick and the little rod?

A. There wasn't anything in that one.

X Q. 63. Was there anything else in the other flattened rolls?

349 A. In another flattened roll there was a wad of paper in the ends.

X Q. 64. Please look at the Defendants' Exhibit Windsor House Flattened Roll, and state, if you can, whether or not the fixture is the same size, shape and dimension as the ones you saw in 1884 at the Windsor house.

A. The present exhibit looks like the one in use at the Windsor house. It is so long ago that I wouldn't like to swear to the exact dimensions.

X Q. 65. Are you prepared to say that the roll on this exhibit is of the same size and dimensions as the roll which you have testified you saw at the Windsor house in 1884?

A. I should think it looked like it, but I wouldn't want to swear to it.

X Q. 66. The roll in the exhibit fixture may be thicker or thinner than the ones you saw at the Windsor house in 1884, and you not be able at the present time to distinguish the difference. Is this correct?

A. The rolls I saw at the Windsor house were different thicknesses as they were used, and after they were used up they would not be so thick, and I don't know, to my knowledge, as I ever saw a whole new roll in the fixture. I never saw a roll there as thick as that.

X Q. 67. How did the free end of the paper hang on the rolls of flat paper which you saw at the Windsor house? Did it hang in the front or rear of the roll?

A. It hung at the rear of the roll, as shown in the exhibit.

X Q. 68. And the roll rested against the wall or partition to which the fixture was attached, as in the exhibit. Is this correct?

A. It rests just as it is in the exhibit, the board representing the wall.

350 X Q. 69. Was the flattened roll, which you say you saw in the office of the Windsor hotel in the year of 1884, the same in form as the other flattened rolls you have testified to? Was it perforated paper, and how was it supported in the fixture?

A. The flattened roll in the office looked like the other flattened roll. I never examined the paper to know whether it was perforated. I think the fixture was fastened to the building. I think it was supported the same way as in the exhibit, on a rod in the fixture. Every time I was there, when I walked through the hall I saw a flat roll of paper in the fixture, like in the exhibit, fastened to the building, but never examined it or took any paper off of it.

X Q. 70. How flat was the roll, and what, if anything, was in the center of it? I refer to the roll in the office.

A. The roll in the office was flattened. I couldn't say how flat. I never examined the center of the roll, and cannot say what was in the center of the roll.

X Q. 71. In your testimony you have made mention of flattened rolls. Please state what you mean by a flattened roll.

A. The flattened roll looked to me the same as if you took a round

roll and tried to smash the sides in as small as possible. Of course it couldn't be perfectly flat.

X Q. 72. Did you ever see anybody taking paper from the flat roll in the office at any time during your stay at the Windsor hotel in the year 1884?

A. I have seen different ones taking paper.

X Q. 73. Please describe the operation as you saw it performed in 1884.

A. I have seen them pull off a sheet of paper, but I didn't watch them to notice anything more particular about it.

X Q. 74. Did they pull off one sheet at a time?

351 A. I didn't watch them close enough to see how many sheets of paper they pulled off. I noticed they went to the fixture to take paper.

X Q. 75. Have you seen a fixture with the stick and the flattened roll at the Windsor house since the summer of 1884?

A. I have not been in the water-closets of the Windsor house since the summer of 1884, nor seen in the Windsor house since 1884, except January 28th and 29th, 1886. I saw the Coffey exhibit, and also the old original fixture that hung in the office. It was still hanging in the same place in the office.

X Q. 76. Are you willing to swear that the fixture you saw in the office in 1886 was the same identical fixture you saw there in 1884?

A. I have good reasons to believe it is the same fixture, but I am not willing to swear to it. I was told by Capt. Coffey it was the same fixture, and had always hung there.

Q. 77. Then from the summer of 1884 to Jan., 1886, you did not see a fixture with flattened roll and a stick through the centre at the Windsor house? Is this correct?

A. I saw a flattened roll in the office of the Windsor house through the summer of 1884 up to Nov., 1884, and I didn't see the other flattened rolls after the last of Aug., 1884, because I didn't go into the water-closets after that time.

Answer objected to as not responsive.

Q. 78. Did you at any time between the last of August, 1884, and the 28th of January, 1886, see in the Windsor house a fixture containing a flattened roll with a stick through the centre of the roll?

A. I did not.

R. D. Q. 79. When you took paper from off the fixtures
352 with the flattened rolls in them in the spring and summer of the year, 1884, how did it come off the roll?

A. It tore off the roll in small pieces.

R. D. Q. 80. Did the fixture which you saw in the office of the Windsor house in January, 1886, have the appearance of an old or a new fixture?

A. It had the appearance of an old fixture.

R. D. Q. 81. Was it in the same place in the office in which you saw the fixture when you were there in the year 1884?

A. It looked to me as if it was in the same place.

R. D. Q. 82. You have stated in your answer to cross-question 78, that you did not between the last of August, 1884, and the 28th of January, 1886, see in the Windsor house, a fixture containing a flattened roll with a stick through the centre of the roll; do you mean by that answer that there was no stick in the centre of the roll which you saw in the fixture hung up in the office of the Windsor house as late as the time you left off boarding at the Windsor house, namely November, 1884.

Objected — as incompetent and grossly leading.

A. I do not mean to say there was no stick in the roll.

R. X Q. 83. Can you say of your own knowledge that there was a stick in the roll referred to in the previous question, and that it was there at the time mentioned?

A. Of my own knowledge I cannot say there was a stick there.

R. X Q. 84. In your answer to redirect question 79 you state that when you took the paper off the fixture having the flattened roll in the spring and summer of 1884, it tore off in small pieces; please state what you mean by small pieces.

353 A. The pieces were large enough to use in the water-closet.

R. X Q. 85. Did it always tear off in pieces of uniform length?

A. If I was careful how I pulled the paper I could pull it off every time the same length, and sometimes if I pulled it quick, it would sometimes tear off the same length and sometimes break into smaller pieces.

R. X Q. 86. Did the roll always turn when you were tearing off a piece?

A. The roll would always turn or move.

R. X Q. 87. How far would it move?

A. I can't say how far it would move.

R. X Q. 88. Where would the end of a strip of paper from which you tore off a piece rest after you had moved the roll in tearing off a piece?

A. The end of the paper hangs at the bottom of the roll, long enough to take hold of it.

R. X Q. 89. In operating the roll in 1884, did the end of the paper always hang in the same position below the roll after you had removed a piece?

Objected to as immaterial.

A. When the piece is tore off even the ends of the paper would remain in the same place, and when the paper tore uneven, the paper hung down lower.

R. X Q. 90. Is your recollection on this point better and more distinct now than it was in January, 1886, when you gave your testimony in the interference?

A. My recollection about the paper is not any better than it was in 1886.

R. X Q. 91. Did the paper always hang down so that the free end could be grasped without turning the roll?

A. The paper didn't always hang down; it was not necessary to always turn the roll again.

354 R. X Q. 92. If the paper didn't always hang down how did you get hold of the end when it didn't hang below the roll?

A. I could reach the end of the paper with the thumb and forefinger at the back of the roll, and pull the paper down as I have shown in the exhibit.

R. X Q. 93. Were the perforations in the paper at regular intervals, so that when the end was torn across the line of perforation each sheet would be practically the same length?

A. I wouldn't like to say each sheet was of the same length where it was perforated; I should think it was somewhere near the same length.

R. X Q. 94. Did you notice that the sheets were of different length in the same roll?

A. I wouldn't like to say they were different. I haven't paid any attention to the length of the paper.

R. X Q. 95. In using the flattened rolls in 1884 did the paper always tear off at the same point on the surface of the roll?

A. They didn't.

R. D. Q. 96. You say in answer to cross-question 87, you don't know how far the flattened roll would turn in pulling off the piece of paper, in what direction would it turn?

A. Upwards.

ALBERT A. MAGUIRE.

Sworn to before me this 15th day of January, 1889.

STUART G. SPEIR,
Notary Public and Special Examiner.

Indorsed: Deposition of Albert A. Maguire. Taken Jan. 15, 1889. Dep. of Henry B. Richardson. Filed Mar., 1890. W. S. Doolittle, clerk.

Adjourned to Wednesday, January 16, at 10 o'clock a. m.

355 WEDNESDAY, *January 16th*, 1889—10 o'clock a. m.

Met pursuant to adjournment.

Present: Counsel as before.

Deposition of Robert J. Coffey, a Witness Produced and Sworn in Behalf of the Defendants.

Direct examination by A. J. TODD, Esq., of counsel for complainant:

Q. 1. State your name, age, residence, calling and occupation.

A. Robert J. Coffey, age 46. I am a superintendent of the Vermont soldiers' home at Bennington, Vt., since April, 1887.

Q. 2. Were you proprietor of the Windsor house, Windsor, Vt., at any time; if so, state from when to when?

A. October 1st, 1882, to April, 1887.

Q. 3. What kind of water-closet paper was used in the water-closets of that hotel when you first opened it?

A. There was nearly a case of perforated toilet paper purchased with the furniture of the house; round rolls of perforated toilet paper made by the Albany Perforated Wrapping Paper Company, and fixtures with it.

Q. 4. Was there any change made in the paper used in those fixtures; if so, when and by whom and what was the change?

A. There was a change made by myself. I conceived the idea of making flattened roll of paper and put it in those same fixtures that were in use, making a roll of paper that tore off in short lengths instead of a continuous piece. I did this early in the year of 1884.

Q. 5. How many fixtures did you so put into use with flattened rolls of toilet paper, and where in the hotel were they put?

356 A. I made some of those flattened rolls for four fixtures, one for each of the three closets upstairs, there being no closets on the first floor. One flattened roll was placed in the fixture that hung in the office.

Q. 6. How long did these four fixtures and flattened rolls continue in use in that hotel?

A. Over a year.

Q. 7. State the date when the flattened paper was discontinued to be used in the water-closets.

A. It was some time about the first of September, 1885.

Q. 8. How about the flattened rolls in the fixture in the office. Was that discontinued to be used?

A. That wasn't discontinued until after I went to Bellows Falls, and at the office of Mr. Read we made application for the patent. It was then discontinued, as considered safe to do so. In the latter part of the year 1885.

Q. 9. How did these four fixtures, with flattened rolls, operate as to the tearing off of the paper in short pieces, successfully or unsuccessfully?

A. Three of them accomplished their purpose quite well, the other one with good satisfaction and success.

Q. 10. State how continuous was the use of these flattened rolls of paper on these four fixtures from the time you so commenced to use them on the fixtures in the early part of the year of 1884 until you discontinued the use of the flattened rolls, as you have stated, in the latter part of the year 1885.

A. Constant and continuous use while those fixtures were in place.

Q. 11. How many persons used paper from off of the flattened rolls in those fixtures, and what class of persons made use of the paper?

A. All the male boarders and transient persons stopping at the house, as well as my male help; also myself.

357 Q. 12. Why was the use of the flattened rolls discontinued in the three water-closets of the hotel about the first of September, 1885, as you state in answer to 7th question?

A. On account of the purchase of a different toilet paper, not per-

forated with a set of fixtures that came with it, known as the Cabinet fixture, which tore off, at your pleasure. The paper was tore off by pulling it over a knife having teeth, so you could get off any size piece you wanted.

Q. 13. Why did you purchase and put up this different paper and fixtures in those three water-closets in place of the flattened rolls and fixtures?

A. At that time the difference in the price between the continuous roll of paper, or not perforated, and the perforated, bought the new fixtures and the case of paper and left a small margin in my favor. I bought it of a party who patronized the house, and, as was usual with commercial men that stopped at the hotel, I purchased goods of them for the purpose of drawing custom, and as a business matter. This man made it a point to stop at the hotel, and this was the only thing in his line of goods that I needed.

Q. 14. Did you, at that time, discontinue the use of the flattened rolls in those three water-closets because they were not a success as to tearing off the paper in short pieces?

A. No, sir.

Q. 15. After the new paper went into the three water-closets, was the use of flattened rolls continued in the fixture in the office?

Objected to as leading.

A. It was.

Q. 16. And up to what time?

A. Up to the time it was placed in the hands of our attorney, Mr. Read, Bellows Falls, for the purpose of securing a patent on the same.

358 Q. 17. State how you flattened those rolls and retained them in a flattened position, which were used in those four fixtures.

A. The first rolls came to me flattened, by coming in a small quantity, and in nailing on the cover it compressed them in a flattened shape. After that they were flattened by standing on them with the weight of the body. Three of them were fixed after the flattening by wads of paper. The one in the closet—in one of the closets next to the window—after a short time, was fixed with a flat piece of wood, which made said fixture operate with good success. It was held in the fixture by a wire spindle which came with the fixture; the slot in said piece of wood keeping it in its place.

Q. 18. What became of those three fixtures which were in the water-closets, one of which had a piece of wood in it to keep the roll in a flattened position?

A. They were taken off by my clerk, Mr. Greene, and put, as I supposed, in the store-room. They were taken off by Mr. Greene, without his asking me if he should do it, and I did not know but what the fixtures and all the parts and the wooden stick were laid up in the store-room, where he had told me he had put them until it became necessary to look for them; when it became necessary to look for them the fixtures were all there, but the wooden piece which

I had used in one of them, and it became necessary for me to make one to represent how said fixture was prepared and worked.

Q. 19. What became of the fixture and roll which was hanging in the office with the last flattened roll which you put in it?

A. It was still hanging there, and up to the time that I left the hotel in April, 1886, the last flat roll had been used in it in the winter of 1885 and 1886, after going to Bellows Falls, I think not until January, 1886.

359 Counsel for complainant states that he was given to understand during the examination of Mr. McGuire that the absence of the original fixtures, testified as having been in the Windsor hotel in 1884, would be accounted for satisfactorily, and upon the request of counsel for defendant not to necessarily encumber the record he refrained from entering an objection at that time. Counsel for complainant now objects to the testimony heretofore taken concerning certain fixtures alleged to have been in use in the Windsor house, at Windsor, Vt., unless said original fixtures are produced or their absence satisfactorily accounted for.

Q. 20. Have you ever searched for those three fixtures that were in the water-closets in the Windsor house, and if so, with what success?

A. I did at the time of the taking of the former testimony, in the interference case January 28th, 1886; I went to the store-room personally and made search for them; found all the fixtures and their parts excepting the small piece of wood which had been used in the closet and fixture next to the window. I made diligent search to find the same, but was unable to find them. I am confident it was there and seen by myself personally after being taken out of the closet and put into the store-room, which was used for other supplies, as well as toilet paper, and others have the keys to go to the same for such stores and supplies, and am confident it was taken or used by some person not knowing its value to me. I enquired of my clerk and my wife if she ever remembered of seeing and throwing it out, or using it for any purpose or use. I could get no information or remembrance about it from them.

360 Q. 21. Do you know where those fixtures are now, with the exception of that wooden piece; also, where the office fixture is now?

A. I do not.

Q. 22. Do you believe they are in the Windsor house still?

A. I should think they were something that would be preserved. One of them was furnished to Mr. Thompson to illustrate the working of the flattened roll. The rest of them I have no knowledge of.

Counsel for defendants asks counsel for complainant whether he wants search made for, and the production of the fixtures referred to, if they can be found.

Counsel for complainant states that the examination of witnesses at this time was restricted, by stipulation, to the evidence touching

the Coffey defence, and that he assumed, under the circumstances, the defendants would be prepared to make proper and legal proof of such facts pertaining to the Coffey defence as were relied upon for the purpose of avoiding delay, and, at the same time, reserving the objection to the evidence, counsel for complainant consents that the examination may proceed with the understanding that if notice is served upon counsel for defendant within ten days from to-day he will produce said original fixtures or account for their non-production. This applies to all the fixtures testified to as having been used with flattened rolls.

Q. 23. Where is William E. Greene, if you know?

361 A. His last post-office address to me was Travers, Cal., in charge of a store at a mining camp, or near there.

Q. 24. Did the guests of the hotel that used any of this flattened roll paper in the years 1884 and 1885, refer to its use to you in conversation with you; if so, what did they generally say about it?

A. They did, and I explained to them about it as far as it was policy to do so, and to protect myself told them that I had applied for a patent, or had got it in shape, so that I had it protected. This was before I had made the application.

Q. 25. Did the guests notice the economy in the use of the flattened rolls in the way of taking off short lengths at a time, and did they speak to you about it?

Objected to; 1st, as leading; 2nd, as incompetent; and 3d, as calling for hearsay evidence.

A. They did. Some of them commented upon it with favor, and some of them against it, or they didn't like the idea on account of its tearing it off to them in short pieces instead of one long continuous piece to them.

Q. 26. Please look at the model before you, marked Defendants' Exhibit Windsor House Flattened Roll and Fixture. State how the fixture in the flattened roll and center stick, with rod attachment, compares with or differs from the fixture and flattened roll which was used in the water-closets of the Windsor house, the one nearest to the window.

A. The metal part of the fixture and rod are, I think, identical, and of the same pattern as those I purchased when I took possession of the Windsor house, with the other furniture and other goods, the rolls of paper in shape as I made them, and the stick is the same, excepting that mine was rough in its workmanship, and was of soft wood.

362 Q. 27. Do you remember a Mr. C. C. Johnson, of Springfield, Vt., calling at the Windsor house and seeing these flattened rolls and fixtures; if so, when was that visit of Mr. Johnson's?

A. He came there at the house or hotel and made a short visit one forenoon during the use of this flattened roll; I do not know that he saw them at that time. He asked me questions in regard to the toilet fixture, &c. I did not know at the time that he was a

mechanic and working up in the ideas of toilet fixtures and paper to go with them; I have since learned that he was.

The last portion of the answer objected to as hearsay.

Q. 28. Did you at the time of the so calling at the hotel tell him that you had flattened rollers and fixtures in use there?

Objected to as leading.

A. No, sir; I don't remember what the conversation was, because I was in perfect ignorance of what his object was until later.

Q. 29. How long did he stay at the hotel, and did he register or take any meals there?

A. He remained but a short time and did not register and took no meals. I have since learned that he made another visit in my absence; there was no register at the time of his name in the hotel at the time of the second visit.

The latter part of the answer objected to as not responsive and hearsay.

Q. 30. Who told you subsequently that he had been at the hotel in your absence?

363 A. Albert A. McGuire, of Springfield, Vt.

Answer objected to as not offering the best evidence of the fact.

Q. 31. When Henry A. Thompson, of Bellows Falls, Vt., called on you, if so, with reference to this flattened roll and fixture, if so, when?

A. He called on me late in the fall of 1885.

Q. 32. At the time of Thompson's visit did he say anything to you about Johnson having told him about your flattened roll and fixture and about him, Johnson, having seen it at the hotel previously?

Objected to as leading and so much of the question and the answer thereto as calls for or contains secondary or hearsay evidence is also objected to.

A. He did. He told me that it was through him, Johnson, that he learned that I had had a flattened roll of paper prepared so that it tore off in pieces in one of the closets at the Windsor house, and that he had been there and seen it; and that he, Johnson, found out about my idea by showing a fixture which he was to work upon for toilet paper to Albert A. McGuire, who then described to him what he had seen at the Windsor house while stopping there in one of the water-closets, and that is what first brought Mr. Thompson, of Bellows Falls, to come and see me in regard to the matter.

Answer objected to by complainant's counsel as containing secondary evidence, no sufficient foundation having been laid for the production thereof; the answer is further objected to as hearsay and incompetent.

364 Q. 33. You have stated that in one of the fixtures the flattened rolls contained a wooden stick and that in the others

paper was stuffed in the center. How did the flattened rolls act, comparatively speaking?

A. They acted with considerable success, but not so perfect as the one with the stick.

Cross-examination by Mr. CHURCH:

X Q. 34. Were all of the flattened rolls made by you or used in the Windsor house during the years 1884 and 1885, as stated in your direct examination, the ordinary rolls of perforated toilet paper commonly in use and which you converted into a flattened roll by pressing the sides together? Is that a fact?

A. It is.

X Q. 35. You did not wind any rolls, did you?

A. Never wound a roll nor changed the roll in any case except to flatten it.

X Q. 36. What were the dimensions of the roll or rolls which you flattened as stated?

A. That I cannot state, except that they were the ordinary rolls of perforated closet paper manufactured by the Albany Perforated Wrapping Paper Company.

X Q. 37. Were the rolls of perforated paper which you have stated were received in flattened condition being made so by the manner in which they were put up the first rolls of ordinary perforated paper you had ever seen with the sides pressed more or less together?

A. They were the first that I had ever seen.

X Q. 38. Was the paper composing the roll perforated at regular intervals in all of the rolls that you flattened?

A. I know of no reason why they were not the same; I never discovered any difference.

365 X Q. 39. About what was the size of the opening through the center of the ordinary round rolls of toilet paper, which you flattened in the manner described, before they were flattened?

A. Less than an inch; should judge about three-fourths of an inch.

X Q. 40. What was the length of the piece between each of the lines of perforation?

A. I never measured it; should judge from six to seven inches.

X Q. 41. Please state about what the diameter was of the round roll before you flattened it.

A. I never made a measurement; should judge in the vicinity of four inches.

X Q. 42. Would the outer sheet of one of the round rolls pass entirely around the outside when the roll was new?

A. I never discovered that, whether it would or would not.

X Q. 43. Would the last sheet in the roll extend around the central opening but once, or would it lap or wind over upon itself several times?

A. Never got down to as fine a point as that on closet paper; would throw away any part of a roll rather than to have a small part of a roll and replace it with a new roll if not already gone.

X Q. 44. About how much of the roll would you throw away?

A. I would not throw away any if I thought it would last until it was seen by me again; if not, I would take it out and replace it with a new roll; this duty I did myself nearly the whole time of my being engaged in the Windsor house as its proprietor.

X Q. 45. When you took the old roll off, or the inner portion of the old roll, preparatory to putting a new roll on, did you never observe whether or not the sheet on the end of the roll which you took out lapped once or more around the roll?

366 A. No, sir; I never observed it.

X Q. 46. And is this true as to the flattened rolls, as well as the round or unflattened rolls?

A. Yes, it is true; I never observed anything on that point.

X Q. 47. In these rolls both the round and the flattened rolls that you have heretofore referred to, where was the paper designed to tear, and where did it in fact tear?

A. It tore where perforated.

X Q. 48. Would it always tear on the line of perforation?

A. I never noticed it to tear anywhere else.

X Q. 49. And is this true as well of the flattened as of the round roll?

A. It is.

X Q. 50. How many pieces or sheets would tear off of the flattened roll when on the fixture?

A. One or two almost invariably.

X Q. 51. Was there any difference in the operation of the flattened roll when new and when partially used up?

A. Some slight difference.

X Q. 52. Please state the difference in operation between a new full roll and a roll from which say two-thirds of the paper or thereabouts had been removed.

A. There wasn't any particular difference down to two-thirds of a roll between that and a full roll.

X Q. 53. Do you mean to be understood as stating that the flattened roll operated the same when two-thirds of the paper had been removed, as it did when full, and that under both conditions sometimes one and sometimes two sheets would be removed by a pull on the end of the strip?

A. I mean to say that it worked nearly as well, down to that point as in a full roll. In either case you would get one or two sheets off at one pull.

367 X Q. 54. You say in your last answer that it worked nearly as well, will you please state fully all of the differences in the operation so that we may judge what you mean by nearly?

A. When the roll was nearly used up, it would not work as successfully as when the full roll was first placed upon it in coming to a stop at all times, and tearing off in one and two lengths. There was no difference up to its being two-thirds used up.

X Q. 55. About how much of the roll was used up before it commenced to act differently, and what was the proportion of the roll on the fixtures when it began to work differently or badly?

A. Less than two-thirds used up before it began to show any change in operation.

X Q. 56. When did you file your application for a patent on the flattened roll and fixture?

A. I have no memorandum of the date with me; Mr. Henry Thompson of Bellows Falls has all the papers in his possession in regard to the application.

X Q. 57. Did you file more than one application?

A. No, sir; not that I know of.

X Q. 58. And that was the application upon which you were placed in interference with the application of Oliver H. Hicks, declared on the 25th day of November, 1885?

Objected to as *as* immaterial because the issue here is different from what it was in that interference proceeding.

A. It is.

X Q. 59. Did you testify in that interference concerning the same flattened rolls and fixtures mentioned in your direct examination?

A. I did.

368 X —. 60. Are you the Rob't J. Coffey who testified in the interference referred to entitled Coffey *vs.* Hicks, on the 28th of January, 1886, at Windsor, Vt.?

A. Yes; I am.

X Q. 61. How many flat rolls did you use with a stick in the center?

A. That I cannot answer definitely as to number, but all that we have used in that farther closet, next to the window, after being arranged with a flattened stick inside.

X Q. 62. Did you have but four fixtures up at your hotel at Windsor during the year 1884?

A. That is all.

— Q. 63. And in using the flattened rolls on three of these did you always push some paper in the center of the roll?

A. I always flattened the rolls and fixed them with paper; that was all I used in them.

X Q. 64. Previous to your discovery of the flattened roll how did you use the round roll in your fixtures?

A. In a natural condition; I simply put the wire through as they came from the Albany Perforated Paper Company.

X Q. 65. Do you know, of your knowledge, that they came from the Albany Perforated Wrapping Paper Company?

A. They came billed as such, and the fixtures were stamped Albany Perforated Wrapping Paper Company.

X Q. 66. Did you ever stuff paper or anything beside the wire or spindle in the round roll when used on the fixture?

A. Don't remember as I did.

X Q. 67. The flattened rolls which you used on three of the four fixtures without the stick were placed on the fixtures in the same manner as the round rolls, were they not?

369 A. They were all flattened first and then packed with

some of the paper before placing in the fixture to hold a spindle in its place.

X Q. 68. How did the flattened rolls operate with the paper in them when, say two-thirds of the paper had been pulled off?

A. I stated down to two-thirds of the roll; there was not much difference in the working of the roll. After the roll was nearly used up it would not always accomplish its purpose every time in coming to a stop and tearing off in one and two sheet lengths.

X Q. 69. Did the flattened rolls with the paper stuffed in them operate as well as the flattened roll with the stick?

A. No, sir; they accomplished their object of saving paper for me, and I was satisfied to use them in that way while I continued to use them.

X Q. 70. Did you make any changes or alteration in the flat stick which you used on one of the fixtures from the time it was first placed on the fixture until its use was discontinued and the fixture removed; if so, state what changes you made.

A. The first stick that I put in was simply smooth on the top; then I cut the groove out for the spindle to lay in. After that I never made any other change that I remember of.

X Q. 71. What was this flat stick made from and how long did it take you to prepare it?

A. It was made from a small piece of wood with a common jackknife, procured down in the basement or woodshed, without the assistance of any shop or bench.

X Q. 72. Did you get the same results with the paper in the flattened roll as with the stick?

A. I did, but not as perfect a result.

X Q. 73. In what respect did the result differ?

A. Those prepared in the two dark closets did not accom-
370 plish their object in tearing off in regular sheets near as much of the roll as was prepared with the stick.

X Q. 74. How long would it have taken you to have put sticks in the other three fixtures where you were using paper in the middle of the roll?

A. Not over ten or fifteen minutes.

X Q. 75. I read the following questions and answers from your testimony in the interference, Coffey *vs.* Hicks, viz:

"X Q. 109. Did you use the flat stick on all of the fixtures?

"A. 109. No, sir; on only one.

"*Q. 110.* That's the one that I experimented with; fixed the others different.

"X Q. 111. How did you fix the others?

"A. 111. With paper, but got no result from those as claimed with stick."

Will you please state if the answers were true, to the best of your knowledge, at the time they were given?

A. Yes, in explaining the use or experimenting with those fixtures to make them a success, I supposed the word experimented meant perfecting the machine or improving it.

X Q. 76. Have you ever read or had explained to you the decis-

ions rendered by the examiner of interferences, the board of examiners-in-chief and the Commissioner of Patents in the interference in which that testimony was given. I refer to the decisions in the Coffey-Hicks interference, copies of which are in evidence in this cause.

Objected to as immaterial because what the witness may think of those decisions cannot possibly affect the question of fact here involved, and because the issue here involved is not the same as that involved in said interference proceeding.

371 Counsel for complainants calls attention to the fact that the witness has testified that the only flattened rolls used upon fixtures at the Windsor house during the years 1884–'5 were the same that he testified with respect to in the interference case and that he has testified to in this case; and, further, that the issue involved is substantially the same that the application of Mr. Hicks, which was involved in said interference, eventuated in the grant of one of the patents in suit. Counsel moreover calls attention to the fact that he has not asked the witness's opinion of the decision referred to, but wishes to know if he had made his answer to cross-question 74 in the light of said decision.

A. I visited Mr. Thompson several times after the former testimony about the time that he received the testimony in print. He read to me a portion of the decision and gave me the testimony of myself, Low and McGuire. That is all I ever heard about the decisions up to the present time.

Answer objected to as not responsive.

X Q. 77. Do you mean to state that you were unaware up to the present time how that interference was decided, whether in your favor or Mr. Hicks' favor?

A. I do; as far as the case has been finally settled or decided upon, as I have supposed the case is still pending or waiting for a final settlement with the Commissioner of Patents.

X Q. 78. Since the testimony was closed in the interference proceeding you have never then made inquiry of your attorneys nor have they informed you as to the result of the interference proceeding; am I correct?

372 A. You are; a few weeks ago Mr. Thompson, of Bellows Falls, sent me a communication from Mr. McIntyre, our attorney, stating that the case was still pending or in a shape to be taken up, and had value and asked for advice.

All of the answer after the first two words objected to as not responsive, but as purely volunteered.

X Q. 79. In using the stick in the flattened roll, was it your intention that a single piece of paper only should be torn off each time the end was pulled?

A. It was.

X Q. 80. Are you positive on this point?

A. I am positive it was my intention, and that is what I tried to accomplish.

X Q. 80½. I read from the testimony of Rob't J. Coffey in the interference, Coffey *vs.* Hicks, the following questions and answers, viz:

"X Q. 99. In using the flattened roll with the stick, as referred to in your testimony, did the end of the paper always hang down below the roll?

"A. 99. I paid no regard to that.

"X Q. 100. Where was it your intention the paper should tear?

"A. 100. As near under the roll as possible; the nearest perforation under the roll, or under it.

"X Q. 101. Was it your intention that a single piece of paper should be torn off each time the end was pulled?

"A. 101. No, sir."

Will you please state whether or not the testimony so given in the interference was true to the best of your knowledge at the time it was given?

373 Objected to as not being a full statement of the witness's answer, as cross 102 answer in that deposition is to effect a continuation of the answer, and should be read to the witness. Answer 102. "Perhaps one—perhaps two."

Counsel for complainant states that the answer last quoted was not given in response to any of the questions quoted.

Defendants' counsel, for the information of the court, quotes the following question- and answer-:

"X Q. 102. How much would usually be torn off each time the end was pulled?

"A. 102. Perhaps one; perhaps two.

"X Q. 103. Am I to understand that it varied in amount?

"A. 103. Yes."

Defendants' counsel insists that all three of these questions and answers should go together; and interprets the intention of the witness, considering the limit of his device, which he then had in practical operation.

Counsel for complainant protests against this unwarranted interference with his examination of the witness. The objection stated by counsel for defendant- being an obvious intent to instruct the witness while under examination.

A. I should think, as stated in my previous answer, that it was my intention that it should, as in the previous answer stated, and is what I was trying to accomplish.

374 X Q. 81. When was the last time you saw the flat stick which you say was used in the flattened rolls of paper at the Windsor house, Windsor, Vt., during the year 1884?

A. I saw it at any time that I visited the closet in 1884, after it was put in its place. I am confident I saw it several times after it was taken out by my clerk and put upon the shelf with the fixtures in the store-room where closet paper was stored. I can't fix the time when I last saw it.

X Q. 82. What instruction, if any, did you give your clerk concerning the taking out of the old fixtures in 1885?

A. I didn't give him any instructions.

X Q. 83. You knew, however, that they had been removed and about the time of their removal?

A. Certainly.

X Q. 84. And you made no objection?

A. I made none. I asked him what he had done with the old fixtures, and he told me he had put them in the store-room with the others.

X —. 85. The Mr. Thompson of Bellows Falls that you have referred to was interested in your application for flattened roll and fixture. Was he not?

A. He was after going to Bellows Falls and making the application for the patent.

X Q. 86. Is it not a fact that he suggested the filing of an application?

A. Not at first. He told me there was value in it; I told him I had not the means to carry it through with the competition that I would have to secure the patent unless I could make some arrangement or assignment, or some other way than by my own means to accomplish it; then upon his advice, recommendations and assistance, I made the application in good faith to secure the same.

X Q. 87. When did you have the first conversation with Mr. Thompson concerning or having reference to the filing for a patent?

375 A. When I met him at Bellows Falls, at Mr. Read's office, after receiving several letters from our attorney, Mr. McIntyre. There was no offer made then from Mr. Thompson until we met there at the office, and the agreement drawn up by Mr. Read.

X Q. 88. Is it not a fact that you were induced to file your application through representations made to you by Mr. Thompson or others acting for him?

A. Partially by Mr. Thompson, and partially by hearing or having heard about Mr. Johnson of Springfield coming there to examine them.

X — 89. Had you determined to apply for a patent before the removal of the fixtures from the water-closets by your clerk in 1885?

Objected to as immaterial as the issue here is prior use and not the use in the interference case of the right to a patent and *and* the equities thereto appertaining. This objection is made and continued as to this whole line of cross-examination without being further noted on the record.

A. The only thing that prevented me from applying for a patent was that circumstances were such that I could not spare the money till I saw some source where I could realize from it; I was in entire ignorance at that time that Mr. Thompson or any one at Bellows Falls was interested in the manufacture of toilet paper, and knew that only the Albany Perforated Wrapping Paper Co., was the only

one that I could make the application amount to anything with in the financial point of view.

X Q. 90. Having now relieved your mind will you answer the preceding questions?

A. I had that in constant view if I could see how to accomplish it; never relinquished it.

376 X Q. 91. Then you had a definite fixed intention to apply for a patent on the flattened roll and fixture with the flat stick when you put in the new fixtures in the latter part of 1885? Is this a fact?

A. It was, and with this object in view I had another invention that I visited Boston with, and took to the Dover Staffing Co., thinking this one that I took to Boston would be more easily secured and disposed of, and one would pay for the other; I also wrote to Mr. McIntyre, my attorney, and sent him a model of this, and he wrote in reply that he would ascertain for me what could be done by it; after receiving at this time the appointment of superintendent of the soldiers' home in Vermont, I also dropped my interest in that, but have the model now in my possession?

X Q. 92. I read from the testimony given by you in the interference, Coffey *vs.* Hicks:

"X Int. 95. At the time you purchased the new fixtures had you a definite intention of filing an application for a patent on the fixture shown in the exhibit. A. 95. No, sir."

I ask you if you remember what exhibit was referred to in that question, and what it represented; also what the new fixtures were mentioned in said question.

A. It was the exhibit of the flattened roll of paper with stick to tear off the sheets, and when I answered that question I had no definite idea; I supposed that I was studying; I had no fixed time in view to make the application.

X Q. 93. Did you make the model Exhibit Windsor House Flattened Roll and Fixture?

A. I did not.

X Q. 94. When was the last time you saw the stick in the fixture at your hotel in Windsor, Vt., I mean before the fixtures were removed by your clerk?

377 A. When I put in the last roll of paper, probably not far from the middle of August, 1885, or any other time.

X Q. 95. Are you sure it was later than July, 1885?

A. I am confident it must have been.

X Q. 96. How did the end of the paper hang on the flattened rolls used in 1884–'5, from the front or the back of the roll?

A. I settled down to hanging the roll with the end next to the wall or back of the roll.

X Q. 97. How did the fixtures which were put in the closets in place of those for holding the round or flattened rolls; I refer to those fixtures which you procured in 1885; how did they limit the amount of paper which could be drawn off at one time?

A. There was no limit.

X Q. 98. Then any person could pull off any length of paper, could they not?

A. They could.

X Q. 99. When did you first put a stick in the fixture hanging in the office of the Windsor?

Objected to as not in cross-examination, as the witness has testified that paper was put in the center of that flattened roll in the office, and so used during the years 1884–'5; that to prove that he put it in since that time, for instance, yesterday, or during an interference case, is wholly irrelevant and immaterial; and counsel begs complainant's counsel to desist from an unnecessary examination into irrelevant facts.

Counsel for complainant states that for obvious reasons he has been compelled to somewhat prolong the cross-examination
378 of this witness and has consented to close the testimony to-day. That he is prepared at the proper time to demonstrate the materiality of this evidence.

A. When necessary at the time of taking former testimony in the interference case; the latter part of January, 1886; to show the construction of the fixture with the flattened roll, at the Windsor house, Windsor, Vt.

X Q. 100. Did Mr. C. C. Johnson, referred to in your answer to direct question 26, have any business connection or relation with the Mr. Thompson who owns an interest in your invention?

A. Nothing that I know of.

X Q. 101. The Mr. Thompson referred to is a member of the firm or company of Moore, Arms & Thompson, of Bellows Falls, is he not?

A. Yes, sir.

X Q. 102. And Mr. J. N. McIntyre, of New York city, who filed your application, represented Mr. Thompson, did he not, in patent matters?

A. He did.

X Q. 103. Have you ever compared Defendants' Exhibit Windsor House Flattened Roll and Fixture with one of the fixtures you have testified to as being in use in the Windsor house in 1884–'5 to ascertain if they are exactly alike in size, proportion and arrangement?

A. Only mentally, and have stated the difference in my testimony of to-day.

X Q. 104. Do you know of your own knowledge that Mr. C. C. Johnson saw your fixture with the flattened roll during his visit to the Windsor house as testified in answer to question 26?

A. I do not.

Redirect:

R. D. Q. 105. Please look at the roll of toilet paper now
379 shown you and state how it compares with or differs from the round rolls of toilet paper which you used at the Windsor

house, Vt., prior to the time of commencing to use flattened rolls of toilet paper.

A. I should say it was the same as to size and quality.

R. D. Q. 106. Was it this make of toilet paper which you made use of as flattened rolls—that is to say, did you make use of the same rolls, only flattening them before you made use of them?

A. I did.

Counsel for defendant offers in evidence the roll of toilet paper shown the witness, and it is marked Defendants' Exhibit Coffey Roll Toilet Paper.

Recross:

Re-X Q. 107. From whom did you procure those round rolls of perforated toilet paper like the exhibit last referred to and which you say you flattened?

A. The first case I found at the Windsor house when I went there and was purchased from Horace French, of White River Junction, Vt., either of Sawyer & Co. or Tuttle & Co., of Rutland, Vt. I may have purchased of both of the latter firms.

Re-X Q. 108. When you say that this exhibit roll is the same as those which you flattened, you merely mean, do you not, that it looks to be the same, and not that you have made a comparison as to the exact dimensions?

A. It looks like the roll, only of a lighter grade of paper than I had; that is the only difference.

ROBERT J. COFFEY.

Sworn to before me this 16th day of January, 1889.

STUART G. SPIER.
Notary Public and Special Exam'r.

Indorsed: Deposition of Robert J. Coffey. Taken Jan. 16, 1889. Filed Mar. 8, 1890. W. S. Doolittle, clerk.

380 SETH WHEELER recalled *upon* on behalf of the defendant:

Q. 1. State what kind of round rolls of perforated paper you made and sold during the years 1883–'4 to the trade for hotel and family use. I mean as to the size of rolls and dimension of opening at the center?

A. The external diameter of the rolls made at that time was about $3\frac{1}{2}$ inches, the internal diameter $1\frac{1}{8}$ inches, the width of sheet being 5 inches, the length of each sheet about $6\frac{5}{8}$ inches.

Q. 2. Please look at the round roll, Defendants' Exhibit Coffey Round-roll Toilet Paper, and state how that compares with or differs from the rolls of paper you so made and sold during those years.

A. It is the same in all respects to those made and sold at that time.

Q. 3. Was this paper manufactured and sold by any other establishment in the United States than your company?

A. To the best of my knowledge and belief, no. We had a pat-

ent on the roll so made, and it has never been infringed that I am aware of.

Q. 4. Did you ever make and sell perforated toilet-paper rolls with a smaller opening at the center than is shown in Defendants' Exhibit Coffey Round-roll Toilet Paper?

A. I never did.

Cross-examination by Mr. CHURCH:

X Q. 5. During the year 1884, or prior thereto, were there not rolls of perforated toilet paper in the market of a different quality from that in the exhibit you have referred to?

A. We manufactured rolls of toilet paper of a different quality, an inferior quality, designed for factory use, and which we
381 termed Number 2, or factory paper. This was not given generally into the hands of the trade, but supplied by us direct to the consumers; that is, to the factories. This coming to the knowledge of the trade, a successful effort was made to obtain it indirectly from us, with the result that we have of late sold it generally to whoever called for it. That is the only perforated paper other than that referred to in my first answer that I know to have been manufactured.

X Q. 6. During the year 1884, and prior thereto, were all of the rolls of toilet paper perforated that were manufactured or sold by you of equal dimensions?

A. The internal diameter of such rolls was uniformly the same, $1\frac{1}{8}$ inches, the external diameter varied from $\frac{1}{8}$ to $\frac{1}{4}$ of an inch, due to the variation in the thickness of the paper composing the roll. We also manufactured rolls having a width of sheet of five inches, also of 6 inches, the internal diameter being the same, and the external diameter varying the same as the other rolls mentioned, and for similar reasons.

X Q. 7. Were the rolls so made and sold by you provided with a central stiffening piece of any kind?

A. They were provided with a stiffened center, which we termed a re-enforced, and served to prevent the roll becoming loosened on its interior, which would prevent the insertion of the suspending core or center wooden roll.

SETH WHEELER.

Sworn to before me, this 17th day of January, 1889.

STUART G. SPEIR,
Notary Public and Special Examiner.

Indorsed: Deposition of Seth Wheeler. Taken Jan. 17, 1889. Filed Mar. 8, 1890. W. S. Doolittle, clerk.

382 Circuit Court of the United States, Northern District of New York.

MORGAN ENVELOPE COMPANY
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER. } In Equity.

Circuit Court of the United States, District of Massachusetts.

MORGAN ENVELOPE COMPANY
vs.
WILLIAM J. MORTON. } In Equity.

Testimony on behalf of the above-named defendants, taken, pursuant to the 67th rule of the Supreme Court of the United States, in equity, as amended, by consent, before me, Andrew M. Todd, notary public and special examiner, at my office, 261 Broadway, New York city.

NEW YORK, *January 30th*, 1889.

Present: J. B. Church, Esq., counsel for complainant; A. J. Todd, Esq., counsel for defendants.

383 GEORGE T. LOW being produced and duly sworn, in answer to the interrogatories propounded to him by A. J. TODD, Esq., says as follows:

Q. 1. What is your name, age, residence, and occupation?

A. My name is George T. Low, my age 40 years, my residence is Windsor, Vermont; my occupation is merchant tailor.

Q. 2. Did you ever stop at the Windsor house, Windsor, Vermont?

A. Yes, sir; I boarded there five or six years. I went there, I think, about 1881. I was there before Mr. Coffey took the hotel. He took the hotel in October, 1882. I remained there until December, 1886.

Q. 3. During this time did you make use of the water-closets? If so, how many were there?

A. Yes, sir; there were three closets.

Q. 4. When you first made use of those water-closets in that hotel what kind of toilet paper, if any, was used in them?

A. The first kind was put up in bunches. The next kind was on rolls—round rolls. The next kind flat rolls.

Q. 5. In what kind of a fixture were these round rolls and flat rolls used?

A. The same kind of a fixture—a metal fixture.

Q. 6. When were the flat rolls commenced to be used in the metal fixtures?

A. They were commenced to be used in the winter of 1884; the fore part of 1884. It was cold weather; it might have been March.

Q. 7. How long were these flat rolls in the metal fixtures continued to be used in those water-closets?

A. They were used until the fall of 1885.

Q. 8. How were these paper rolls retained in a flattened position in those fixtures?

A. By a flat wedge.

384 Q. 9. What was this wedge composed of?

A. A wooden wedge in one fixture. I think the others were pasteboard or paper.

Q. 10. Were these rolls always retained in a flattened shape by this wooden wedge and pasteboard or paper wedges?

A. Yes; it kept them flat.

Q. 11. Did you use the paper from off of these three fixtures with the flattened rolls on them from the fore part of 1884 until the fall of 1885. If so, how continuously or often?

A. I used them every day, and took the paper off the flat rolls.

Q. 12. How did these flat rolls operate in the tearing off of the paper for your use as you state?

A. It would tear off at the perforations about six inches long at each pull on the roll.

Q. 13. How was it with the round rolls which were on the fixtures prior to the year 1884?

A. It would sometimes reel off two or three yards unless you took hold of it and stopped it.

Q. 14. In which closet were the flat rolls used containing a wooden wedge in the center?

A. It was in the further closet, next to the window.

Q. 15. How did these flat rolls operate in so tearing off at each pull on the roll about six inches of a piece at a time—successfully or unsuccessfully?

A. They worked successfully.

Q. 16. Please look at the fixture and flat roll, Defendants' Exhibit Windsor House Flattened Roll and Fixture, and state how it compares with or differs from the flattened rolls and fixtures so used at the Windsor house from the fore part of 1884 until the fall of 1885, as you state.

A. It is the same fixture, and the flattened roll was just like what is on the exhibit.

385 Cross-examination by J. B. CHURCH, Esq.:

X Q. 17. The flattened rolls you have referred to as being in use in the Windsor house did not differ in any particular from the round rolls of perforated toilet paper, except the flattening or pressing together of the sides, thus converting the cylindrical roll into an oblong form. Is this correct?

A. Except that it had the flat wedge in in one closet and wedges of paper in in the other two closets.

X Q. 18. You are, I presume, acquainted with Mr. Robert J. Coffey, who formerly kept the Windsor house?

A. I am.

X Q. 19. You are also acquainted, are you not, with Mr. Thompson of Bellows Falls, Vermont, a member of the firm of Moore, Arms & Thompson?

A. I have met Mr. Thompson once.

X Q. 20. Please state when and under what circumstances you met Mr. Thompson.

A. It was in relation to this same matter three years ago.

X Q. 21. Are you the same Mr. George T. Low who testified for and in behalf of Robert J. Coffey in the interference proceedings, Coffey *vs.* Hicks, entitled Toilet-paper rolls, said testimony having been given on the 29th of January, 1886?

A. I am.

X Q. 22. Was it at or about the time of giving that testimony that you first met Mr. Thompson of Bellows Falls, Vermont?

A. It was.

X Q. 23. You have stated in your testimony that the paper from the flat rolls tore off in pieces about six inches long. Is this true as to all of the flattened rolls?

A. Yes; it was.

386 X Q. 24. Did the paper tear off at the first line of perforations?

A. Yes, sir; it did.

X Q. 25. Was this always the case?

A. It usually did.

X Q. 26. When did you first notice there was a stick in one of the flattened rolls?

A. A little while after he commenced to use the flat rolls. I do not know that I could fix the time definitely.

X Q. 27. When was the last time you saw the stick in one of the flattened rolls in the closet of the Windsor house?

A. I saw them all the time after they were put in until they were taken out in the fall of 1885.

X Q. 28. How many sticks were there in use?

A. In only one machine.

X Q. 29. Will you please explain how the rolls in the other closets and fixtures were retained in flattened form, by means of pasteboard or paper?

A. After the roll was flattened the pasteboard was put in in strips, and it made the hole flat, but did not hold them as flat as the wooden wedge.

X Q. 30. Did you ever see that stick out of the fixture?

A. No; I never did.

X Q. 31. Then how were you able to determine that it was wedge-shaped, as stated in your direct examination?

A. Because the end was out. You could see the shape of it.

X Q. 32. Have you examined Defendants' Exhibit Windsor House Flattened Roll and Fixture to determine whether the stick is of the same wedge shape as the one you have testified to seeing at the Windsor house in 1884–'5?

A. Yes.

387 X Q. 33. Is your recollection concerning the shape of the stick better at this date than it was when you gave your testimony in the interference, Coffey *vs.* Hicks?

A. I do not know that it is.

X Q. 34. I read from the testimony given by you in said interference proceedings: "Int. 17. Did you observe, at the time, what was the shape of the stick that was arranged within the flattened roll? A. No, sir. Int. 18. What was its shape? A. I could not tell the shape; it was a wooden stick"; and I ask you to state whether or not the wooden stick referred to in said answers is the same as that you have testified to in this cause.

A. Yes.

X Q. 35. What form of fixture, if any, replaced those upon which flattened rolls were used when the latter were removed from the closets at the Windsor house in 1885?

A. Well, they were replaced by another kind of fixture. It was a metallic box containing a roll of unperforated paper, the paper drawn over a knife. There was a lid, and the paper, when the lid was down, was as if it was drawn through a slot.

Adjourned to 1.45 p. m.

. NEW YORK, *January* 30, 1889—1.45 p. m.

Met pursuant to adjournment.

Present—counsel as before.

Cross-examination continued by J. B. CHURCH, Esq.:

X Q. 36. I read the following question and answer from your testimony given in the interference, Hicks *vs.* Coffey: "Int. 23. Will you please look at the Exhibit 'Coffey Original Flattened
388 Roll and Fixture,' which I now show you, and state, if you can, whether the flat-roll contrivance, with the stick in it, to which you have referred, was substantially like, or substantially unlike, the exhibit fixture. A. I should say it was substantially like that." Will you please state whether or not the exhibit fixture, roll and stick referred to in said question and answer were more nearly like those in use in the closet at the Windsor house than Defendants' Exhibit Windsor House Flattened Roll and Fixture?

A. I don't think I can remember whether this exhibit is nearer or not.

X Q. 37. At the time you gave your evidence in the interference, Hicks *vs.* Coffey, was the exhibit then shown you a correct representation of the one in use at the Windsor house during 1884 and 1885 as you then remembered said fixture?

A. As I remember it, it was.

X Q. 38. Do you regard the exhibit fixture, roll and stick now before you in all particulars substantially the same as the exhibit concerning which you testified in the interference?

A. I do.

X Q. 39. Did you reside continuously at the Windsor house during the years 1884, 1885, and 1886?

A. I did, up to December, 1886.

X Q. 40. I read from your testimony, Hicks *vs.* Coffey. "Int. 19. Tell me, if you know, whether this stick was arranged below the wire rod that the roll hung on, or above the rod, when the roll was

hanging down from the fixtures ready to take hold of and pull off some paper? A. I don't remember." I ask you now if your recollection on this point has been revived sufficiently to enable you to state positively that the Defendants' Exhibit Windsor House
389 Flattened Roll and Fixture, is substantially the same in construction and arrangement as the fixture roll and stick used at the Windsor House?

A. It has not been revived.

X Q. 41. From which side, front or rear, did the end of the paper hang on those flattened rolls of perforated paper which you state were in use at the Windsor house?

A. From the rear side.

X Q. 42. Did the end sometimes hang on the outside or front of the roll?

A. I think it did, sometimes.

X Q. 43. Prior to the time the fixtures were removed did you see the stick used in any of the other fixtures in the Windsor house?

A. I don't remember that I did.

X Q. 44. Did you ever see one of the flat rolls of perforated paper put into one of the fixtures in the Windsor house?

A. No, sir.

Redirect by Mr. TODD:

R. D. Q. 45. You were asked in X Q. 19, as to a Mr. Thompson, of Bellows Falls, Vt. State where you so met Mr. Thompson, and if you had any conversation about the facts of this case.

A. At the Windsor house, when I testified in the interference case. I can't remember having any conversation with Mr. Thompson. I remember seeing him there.

R. D. Q. 46. You have testified that the form of the stick in one of the flat rolls was wedge-shaped, and you testified, in your former testimony, that you could not tell the shape of the stick. Do you mean now to testify by the language "wedge shape," that you can tell the form of the inside portion of the stick contained within the flat roll?

390 A. No.

R. D. Q. 47. Then what did you mean by the language, it was wedge-shaped?

A. It was a flat stick driven into the hole of the flat roll. That's what I meant by the wedge.

Re-X Q. 48. What do you mean by "driven into"?

A. It was in there, and I assume it was put in. I never saw anybody putting it in.

GEO. T. LOW.

Subscribed and sworn to before me this 30th day of January, 1889.

ANDREW M. TODD,
[SEAL.] *Notary Public and Special Examiner.*

Indorsed: Deposition of Geo. T. Low on behalf of defendant-, Jan. 30, 1889. Filed Mar. 8, 1890. W. S. Doolittle, clerk.

392 DEFENDANTS' EXHIBIT RICHARDSON'S SPECIFICATION AND DRAWING. William O. Day, Notary Public.

This invention relates to improvement in rolled strips of toilet paper, the object being to provide an improved measuring roll of such paper, embodying means integral with the paper itself for measuring the severing of a piece of the strip uniformly at the same point on the roll, the latter not being revolved but being ready for attachment to a frame.

In the drawing forming part of this specification is illustrated a roll of toilet paper (in a perspective view) in Fig. 1, supported on a suitable fixture. Fig. 2 is a perspective view of one end of the roll and its center piece.

(Here follows diagram marked p. 391.)

In the drawing *d* indicates a roll of toilet paper of oval form made from a wound strip of said paper, and *e* is a flat strip center piece, having parallel ends, and made of any suitable material, such as wood or paper, having sufficient rigidity to maintain the roll in its said form and to permit of inserting the pivot *o* in its edge, whereby the roller is suspended, said pivots being located nearer one end of said roll than the other, so that when the latter is suspended one end thereof will hang downward. The roll *d* has a line of perforations, *z z*, which are circular, and extended quite through each of the papers from the outside of the roll to the center piece, *e*. In Fig. 2 the perforations *w w*, are substantially the same in their effect as those in Fig. 1, the only difference being of form, the latter being rounded and the former oblong cuts, but both serving the same purpose.

Thus, when the pending end, *x*, of the strip in Fig. 1 is pulled the piece is severed uniformly at the said perforated line
393 across the roll, each time separating a piece of paper from the roll of a length equal to the circumference of the latter.

In Fig. 1 A is a suitable back board on which the horizontal arms, *b*, are secured, the latter being suitably perforated to allow of passing the pivot, *o*, through them into the opposite edges of the center piece, *e*, thereby suspending the roll between said arms in the position shown.

When the end, *x*, of the paper in Fig. 1 is torn off a vibrating motion, more or less, is given to the roll, and the end drops down in a convenient position to be grasped, as shown in Fig. 1.

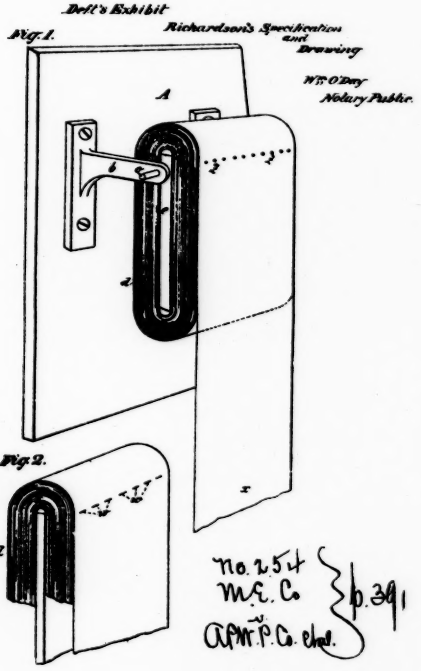
What I claim is:

1st. A wound bolt of toilet paper, having a line of coincident cuts extending from the outside through all the folds of paper.

2nd. A bolt of paper wound on a central core and having a line of coincident cuts extending transversely across the web, and reaching through all the thickness of paper, as set forth.

3rd. A flattened bolt of paper wound on a central core and having a line of coincident cuts extending transversely across the web near

Defendants' Exhibits.



one edge of the bolt, said cuts extending through all the thickness of paper, as described.

4th. A flattened core provided with a suspensory device and having a strip of toilet paper wound thereon, substantially as described.

Indorsed: Def'ts' Exhibit Richardson's Specification and Drawing. Filed Dec. 21, 1889. W. S. Doolittle, clerk.

394 *Opinion.*

United States Circuit Court, Northern District of New York.

MORGAN ENVELOPE COMPANY
v.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY *et al.*

WALLACE, *J.*:

The complainants sue for the infringement by the defendants of three patents granted to Oliver H. Hicks, the first being No. 325,410, dated September 1st, 1885, for "package of toilet paper;" the second being No. 325,174, dated August 25, 1885, for "toilet-paper fixture," and the third being No. 357,993, dated February 15, 1887, for "apparatus for holding toilet paper." All of them relate to cognate subject-matter, the first being for toilet paper when put up in specified form, and the others being for apparatus for holding the paper and permitting it to be removed for use.

The first patent is invalid for want of novelty. The subject of this patent is well stated in the claim that appeared in the application for the patent filed July 10, 1885, viz: "As a new article of manufacture, a bundle of toilet paper, consisting of one or more lengths of paper formed into a flexible continuous band of oblong or oval shape, the short rounded ends of said bands serving as guides for determining the proper points at which the paper is to be separated, in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon
395 which to tear the paper." The only novelty in this patent consists in putting up the paper in the form of an oblong or oval shaped roll. It was old to put up such papor in the form of sheets cut the proper size for use. It was old to put it up in the form of cylindrical rolls, and when it was put up in such rolls it was sometimes in one continuous or unbroken sheet and sometimes in a sheet perforated transversedly at given intervals so that it could be easily torn from the roll in pieces of a predetermined length. It would not seem to involve invention to put up paper in the form of oval or oblong rolls which had commonly been put up in the form of cylindrical rolls; but however this may be, it is abundantly shown in the proofs that it was likewise old to put up the paper in the exact form of the patent. The old oval rolls shown in the patent to Peacock and those like "Defendants' Exhibit No. 24" were of smaller size than the roll preferably contemplated by the patent, but there is no patentable difference between them. Although the

rolls of the patent are not new in a patentable sense, they are peculiarly useful when employed in fixtures like those of the second and third patents, and the real invention of Hicks consists in devising the fixtures in which the paper is to be arranged.

The second and third patents in suit are for a fixture to be used with oval-shaped rolls of toilet paper and which is designed to arrange the paper so as to prevent more than a given quantity of it from being withdrawn from the package at a single operation, and so that in the act of withdrawing that quantity it shall be automatically severed from the package, leaving pendant from the package a free end to serve as a means for withdrawing a like quantity
396 by the next operation. The fixture consists of a back plate, two arms rigidly connected therewith, extending outwardly therefrom at right angles; a flat metal core plate (upon which the roll of paper is designed to be mounted) pivoted on the outer end of the arms and made somewhat heavier on one side of its pivot than on the other, and a blade extending between the arms at their inner end, which performs the functions of both a stop and a cutter. The blade extends forward from the back plate sufficiently to arrest the core plate and limit its motion when rotated in either direction. In operation, after the roll of paper has been mounted upon the core plate, so that a free end is depending, the free end is pulled by the person who desires to use the paper. This pull rotates the roll upwardly until it is arrested by the blade, and when its rotation is arrested one end of the package rests upon the blade and the depending end of the paper is severed at the edge of the blade by another pull. Thereupon the weighted core plate, pivoted as described, swings back the package automatically until the other end is arrested by the blade, when it resumes its original position. The specification states:

"It will be observed that the plate or blade M performs the functions of a stop for arresting the forw-rd rotation of the roll and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper, and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll." The specification also states that the outer edge of the blade M may be made either plain or serrated.

The fixture thus described is an ingenious and meritorious invention.

397 It immediately commended itself to the public as a simple and efficient device by which toilet paper could be economically and readily severed from the roll in pieces of convenient length. It dispenses with the necessity of putting up the paper in sheets or in rolls perforated transversely to enable it to be detached in pieces of requisite length for use; but in view of the "Albany fixture"—a fixture at the time in common use and in which cylindrical rolls of perforated paper were employed—the essence of the invention is in such a construction or arrangement of the blade

and core plate in reference to one another that when the latter is rotated the blade will not permit the core plate to pass by. If there were room enough between the two parts to permit the core plate to pass the blade the apparatus would cease to work when the thickness of the roll of paper would be less than the space between the blade and the core plate.

The second patent contains five claims, each of which is for a combination in which a roll of paper, a knife, and cutter (the blade M) are elements. The third claim, which is the only one alleged to be infringed by the defendants, is as follows:

"The combination, with an elongated or oval oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated, substantially as described."

The defendants manufacture and sell a fixture known as the "Universal fixture," together with oval-shaped rolls of paper to accompany it and be used in it. Their fixture does not contain a cutter, and this is practically conceded by the complainant.

398 The complainant asserts, however, that the defendants infringe this claim, because they sell rolls of oval toilet paper manufactured by them in conjunction with or mounted upon fixtures which had been previously made and sold by the complainant with rolls of paper made by the complainant. The fixtures thus sold by the defendants were once lawfully purchased with paper mounted therein from the complainant, and after the paper was used up the purchasers sold the fixtures to the defendant. In other words, the case is as though the defendant were charged with infringement because they sell rolls of oval paper which they manufacture to persons who have bought the paper and fixtures from the complainant, and, having used up the paper, wish to get more to use with the fixtures. The sale of the paper to those who have a lawful right to use the fixture and to use both the fixture and paper together is not an invasion of the rights of the complainant. The paper as an element of the patented invention is one for temporary use only. The fixture proper is a durable device which is designed to last for many years, while the roll of paper may be completely used up in a few days. This circumstance repels any inference that the right of a purchaser to use the fixture is not to survive the life of the paper. The purchaser who buys a machine or device, patented or unpatented, without any restriction as to the mode or extent of the use to which he may apply it, acquires all the rights of the seller, and may do with it whatever the seller might have done if he had not parted with it. He acquires the right to use it, to repair it, and to sell it to others, and those to whom he sells acquires all his rights.

399 If the original vendor is the licensee of the owner of the patent of the whole monopoly in the use and sale of the article a purchase of the article from him is in legal effect a purchase from the owner of the patent. The sale of the article transfers the monopoly right in the article itself without qualification. Hol-

liday *vs.* Matheson (23 Blatchf., 229). If the purchaser may lawfully repair the article or remove a part of it and substitute another, it is quite immaterial whether he does it with his own hands or procures another to do it for him, and if the act when done by himself does not violate the rights of the owner of the patent it does not when performed by another at his request; so also the purchaser, instead of repairing the article himself or procuring another to do it for him, may sell the article in the condition in which it is to another, and the latter requires all his right to repair it. These rights are all incident to the property in the article itself. The purchaser does not acquire any rights in the monopoly directly, but he does acquire the right of unrestricted ownership in the article he buys as against the vendor, including, as an inseparable incident, the right to use and enjoy it as his own and to transfer his title to others. On the other hand, when the owner of the patent sells the patented article under circumstances which imply that the purchaser is not to acquire an unqualified property in the thing purchased, as where a license accompanies the transfer, the purchasers' rights are limited to the extent implied by the license or the other circumstances. The right to repair a patented article bought of the patentee or to supply a part which has be-
400 come inoperative or worn out is distinctly declared in Wilson *v.* Simpson (9 How., 109) and in Wilson *v.* Rousseau (4 How., 647). If it did not exist the value of the most patented articles would be materially lessened, and thus the owner of the patent as well as the public would fail to derive the full benefit of the invention. There is nothing inconsistent with these views in the case of Cotton Tie Co. *v.* Simmons, 106 U. S., 89. There the patented articles was sold "licensed to use once only," and after it was practically worn out and the right of the purchaser to use it had terminated another person, who bought the parts as old iron, reconstructed them as new into the patented article. If in this case the fixtures had been worn out or had in any other way fully subserved the use for which they were intended when sold the doctrine of that case would apply.

The law of contributory infringement has no application to the case. That doctrine rests on the principle that he who concerts with another to do a wrong is an abettor and equally guilty with the one who actually commits it. Here no wrong has been committed.

The complainant cannot rely upon the inconclusive statement elicited upon cross-examination from the defendant Wheeler to establish a sale by the defendants of paper with fixtures which had not been sold by the complainant. It would be mere guess-work to infer from that testimony that the fixtures thus sold were not originally made and sold by the complainant. The affirmative upon the issue of infringement is with the complainant, and the onus of proof is not satisfied merely by showing a state of facts from
401 which infringement may be conjectured.

The third patent describes the fixture of the second patent, but its claims are for combinations in which the blade has the func-

tion of a stop instead of a knife or cutter as in the claims of the second patent. The claims of this patent alleged to be infringed by the defendants are claims 1, 2, 3, and 5. These claims are as follows:

"1. The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described.

2. The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

3. The combination, with an oscillating roll of toilet paper having its bearings out of line with its centre of gravity and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed the roll will automatically resume its normal position, substantially as described.

5. The combination, with the supporting arms, of an oscillating core plate weighted on one side of its pivots so as to cause the roll supported by it to automatically resume its normal position after being oscillated and a stop, for limiting the motion of said plate, substantially as described."

It is insisted for the complainant that the "Universal fixture" sold by the defendants is an infringement of the fifth claim, and that when that fixture is used with oval-shaped packages of paper the combinations of the other claims are infringed.

This fixture has a back plate and arms which carry a flat metal core plate which is pivoted into them and is heavier on one
402 side of its pivot than on the other. The arms, instead of extending outwardly from the back plate at right angles and being rigidly connected with it as they are in the fixture of the patent, are hung loosely upon the back plate by means of a transverse bar, to which they are attached. This bar is hinged to the back plate. In use, after the paper has been mounted upon the core plate and the free end of the package is pulled the package rotates upward until it comes in contact with the transverse bar. If the package is so large that the arms will not carry it beyond the transverse bar it is stopped, and in that case the paper is more likely to be severed where it is in contact with the bar than at any other place. When perforated paper is used, as it is largely with the "Universal fixture," the bar adds a resistance to the rotation of the package, which causes the paper to break on the line of the perforation. To this extent the transverse bar operates as a stop, but it is obvious that the back plate itself would operate as a stop and that the transverse bar only does somewhat more efficiently the work which would be done by the back plate if the arms were removably attached directly to it. When cylindrical rolls of paper are used in this fixture and are mounted on a cylindrical core

plate, which is usually the case, the transverse bar performs no other function than that of carrying the arms. When, however, oval rolls are used in it and are mounted on a core plate of a width beyond its pivoted centre, which prevents it from passing by the transverse bar when rotated, the transverse bar performs the functions of a stop. When a weighted core plate of the requisite shape and dimensions *are* used in it
403 with the oval-roll paper the parts perform the functions of the fixture described in the specification and shown in the drawings of the patent, except the cutting operation. The several parts of this fixture, exclusive of the core plate, operate conjointly when used with the oval roll of paper just as they do when used with the cylindrical roll. They do precisely the same work which the "Albany fixture" does when used with the oval rolls of paper and by the same mode of operation. The "Universal fixture" is a duplicate in all its parts of the old "Albany fixture," except that instead of the cylindrical wooden spreader upon which the roll of paper is mounted in the "Albany fixture" — has in some instances the core plate of the patent. The defendants sell both the fixture and oval paper to be used in it.

For the reasons stated in considering the validity of the first patent, oval-roll paper was old at the time when the device of the patent was invented. Inasmuch as novelty does not reside in the combination of an old element with other old elements when no new mode of operation results from their conjoint action in the new combination, none of the claims of the patent can be sustained as valid which are to be read as for a combination consisting of the oval roll and the parts found in the "Albany fixture." The core plate is not an element of either the first or the second claim of the patent, and it follows that if the "Universal fixture" when used with such a roll is an infringement of these claims the claims are invalid. If these claims are given a more limited interpre-
404 tation by which a stop structurally such as is described in the specification is an element, the defendants do not infringe them. The same conclusions obtain respecting the third claim. The specific core plate is not an element of that claim, and the oval roll of paper if hung on a cylindrical core plate in the "Universal fixture" or in the "Albany fixture" would have "its bearings out of line with the centre of gravity," as described in the claim.

The fifth claim is for a combination of all the parts of the fixture and can be interpret*at*ed as one in which a core plate and a stop so constructed and arranged with reference to each other that they cannot pass one another when the core plate is oscillated are elements. The two parts are described by letters of reference to the drawings in the specification, the stop as "M" and the core plate as "F," and although the language of the specification does not point out anything in respect to their relative dimensions, the drawings show that they are of such breadth respectively that the core plate cannot be rotated past the stop in either direction. It is apparent that — this feature of relative dimensions were ignored the parts would not co-operate or would only co-operate imperfectly to

perform the functions assigned to them of arresting the roll of paper when mounted and rotated. The core plate of this claim is weighted on one side of the pivots. This is effected when the pivots are arranged eccentrically to the core plate or by attaching them centrally thereto and having one side of the core plate heavier than the other. In such a combination the transverse bar of
405 the "Universal fixture" is the equivalent of the blade of the patent. When a core plate is used in the "Universal fixture" which is weighted or hung so that its depending side when rotated upwardly will be arrested by the transverse bar, if there is any paper left in the roll, and will fall by its own gravity, that fixture infringes the fifth claim of the patent. Such a core plate is sometimes used in that fixture, and the complainants are accordingly entitled to an injunction and an accounting.

The defences which rest on the prior use of the Coffee fixture and the prior invention of Richardson do not meet the fifth claim of the patent as thus interpretated. Coffee did not employ the core plate and Richardson did not employ the stop of the patent.

The complainant is not to recover costs of the suit.

Indorsed: Opinion. Wallace, J. Filed Dec. 11, 1889. W. S. Doolittle, clerk.

406 *Stipulation.*

United States Circuit Court, Northern District of New York.

THE MORGAN ENVELOPE COMPANY
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER.

It is hereby stipulated and consented that the clerk of this court send all of the model exhibits and patent exhibits used on the final hearing in this case to the clerk of the United States Supreme Court at Washington, D. C., to be used at the hearing of the appeal taken in this cause to the United States Supreme Court, at or about the date of the hearing of said appeal, and that the clerk of the United States Supreme Court be requested to return such exhibits to the clerk of this court after the decision of such appeal, and the exhibits which were printed in the records of the respective parties used at final hearing, also Complainant's Exhibits I and J, only to be included in the transcript of record on appeal.

Dated May 8th, 1890.

A. J. TODD, *Sol'r for Def'ts.*
CHURCH & CHURCH,
Sol'rs for Compl'ts.

Indorsed: Stipulation. Filed May 15, 1890. W. S. Doolittle, clerk.

407 *Appeal.*

In the Supreme Court of the United States.

MORGAN ENVELOPE COMPANY, Complainant and Appellant,
vs.
ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER, Defendants and Appellees.

To the honorable the Supreme Court of the United States:

The appeal of The Morgan Envelope Company, the above-named complainant and appellant, showeth—

That upon the 11th day of August, A. D. 1887, the above-named complainant and appellant filed its bill in the circuit court of the United States for the northern district of New York against the above-named defendants and appellees to enjoin and restrain the said defendant- and appellees from infringing three certain letters patent of the United States, to wit, No. 325,410, for packages of toilet paper, dated September 1, 1885; No. 325,174, for toilet paper fixture, dated August 25, 1885, and No. 357,993, for apparatus for holding toilet paper, dated February 15, 1887, all granted to Oliver H. Hicks, and all owned by complainant and appellant, and also praying an account of profits and an assessment of damages arising from said infringement.

That subpœnas issued out of said circuit court were duly
408 served on said defendants and appellees; that the defendants and appellees filed their answer to the said bill of complaint, to which the complainant and appellant filed a general replication.

Whereupon such proceedings were had in the cause that on the 21st day of January, A. D. 1890, a final decree was made and entered in said circuit court, wherein it was, in substance, ordered, adjudged, and decreed that letters patent No. 325,410 were invalid for want of novelty and by reason of prior use; that letters patent No. 325,174 were not infringed, and that letters patent No. 357,993 were not infringed as to the 1st, 2nd, 3rd, and 4th claims thereof, but were infringed as to the 5th claim thereof, and that the said defendants and appellees should be enjoined from making, using, and selling fixtures, devices, and appliances containing or embodying the invention set forth in said 5th claim of letters patent No. 357,993; which said decree is, as complainant and appellant is advised, erroneous and ought to be reversed in part.

Wherefore this appellant appeals from so much of said decree of the circuit court as declares said letters patent No. 325,410 to be invalid for want of novelty and by reason of prior use, and as declares said letters patent No. 325,174 and the 1st, 2nd, 3rd, and 4th claims of letters patent No. 357,993 to be not infringed, and as denies costs to complainant, and respectfully prays that the said decree, the bill, answer, pleadings, depositions, evidence, exhibits, and all the

proceedings in said cause may be sent to the Supreme Court
409 of the United States without delay, and that the said Supreme Court will proceed to hear said cause in respect to the matters appealed anew.

And that the said decree of the circuit court in respect to said matters appealed may be reversed or such other decree made as to the said Supreme Court shall seem right.

Feb. 21, 1890.

MORGAN ENVELOPE CO.,
By CHURCH & CHURCH,
Sol'rs & of Counsel.

Approved as to form.

A. J. TODD,
Sol'r & of Counsel for Def'ts & Resp'ts.

Indorsed: Appeal to Supreme Court U. S. Within appeal is allowed. Dated Feb'y 2, 1890. Wm. J. Wallace. Filed Mar. 1, 1890. W. S. Doolittle, clerk.

410 *Bond.*

UNITED STATES OF AMERICA:

Know all men by these presents that we, Elisha Morgan, of Springfield, Massachusetts, as principal, and Robert W. Day and Wilfred M. Wharfield, both of Springfield, Massachusetts, as sureties, are held and firmly bound, jointly and severally, unto the Albany Perforated Wrapping Paper Company and Seth Wheeler in the sum of one thousand dollars, lawful money of the United States of America, to the said The Albany Perforated Wrapping Paper Company and Seth Wheeler, their successors, heirs, legal representatives, and assigns; for which payment, well and truly to be made, we bind ourselves and each of us by himself, and each of our heirs, executors, and administrators, firmly by these presents.

Sealed with our seals and dated the 14th day of February, A. D. 1890.

Whereas the Morgan Envelope Company having taken an appeal to the Supreme Court of the United States from and to reverse the decree rendered on the 21st day of January, A. D. 1890, by the circuit court of the United States for second circuit, holding sessions in and for the northern district of New York, in the suit entitled Morgan Envelope Company *vs.* Albany Perforated Wrapping Paper Company and Seth Wheeler, No. 5645 of the equity docket thereof:

Now, the condition of the above obligation is such that if the said Morgan Envelope Company shall prosecute its said ap-
411 peal to effect and shall answer all costs if it shall fail to make good its plea, then this obligation shall be void; otherwise to remain in full force and virtue.

ELISHA MORGAN. [L. S.]
ROBERT W. DAY. [L. S.]
WILFRED M. WHARFIELD. [L. S.]

The above bond is acceptable.

A. J. TODD,
Solicitor for Defendants.

The foregoing bond is approved this 21st day of February, 1890.
WM. J. WALLACE.

Indorsed: Bond. Filed Mar. 1, 1890. W. S. Doolittle, clerk.

412 *Citation.*

By the Hon. William J. Wallace, one of the judges of the circuit court of the United States for the northern district of New York.

UNITED STATES OF AMERICA, *Northern District of New York,* } *ss:*

To the Albany Perforated Wrapping Paper Company and Seth Wheeler, and to each of them, Greeting:

Whereas, from portions of a decree lately made by the circuit court of the United States for the northern district of New York, in a certain cause wherein The Morgan Envelope Company was complainant and The Albany Perforated Wrapping Paper Company and Seth Wheeler were defendants, the said complainant has appealed to the Supreme Court of the United States and has given good and sufficient security to prosecute its said appeal to effect and answer all costs:

Therefore you are hereby cited and admonished to be and appear at a Supreme Court of the United States to be holden at Washington on the second Monday of October, 1890, pursuant to said appeal, to show cause, if any there be, why the portions of said decree so appealed from as aforesaid should not be corrected and reversed and why speedy justice should not be done to the parties in that behalf.

Witness the Hon. William J. Wallace, judge of said circuit court, at the city of New York, on this 21st day of February, 1890.

WM. J. WALLACE.

Approved as to form Feb. 21, 1890.

A. J. TODD,
Sol'r for Def'ts.

Service acknowledged this 21st day of Feb'y, 1890.
A. J. TODD, *Def'ts' Sol'r.*

[Endorsed:] U. S. circuit court, northern dist. of N. Y. 5645. Morgan Envelope Co., complainant, *v.* Albany Perforated Wrapping Paper Co. & Seth Wheeler, defendants. Equity. No. 5645. Citation to defendants. U. S. circuit court, N. D. of N. Y. Filed Mar. 1, 1890. W. S. Doolittle, clerk.

413 *Clerk's Certificate.*

UNITED STATES OF AMERICA, }
Northern District of New York, } *ss:*

I, William S. Doolittle, clerk of the circuit court of the United States of America for the northern district of New York, in the second circuit, do hereby certify that the foregoing pages, numbered from 1 to 412, inclusive, contain a true and complete transcript of the record and proceedings had in said court in the case of Morgan Envelope Company *vs.* Albany Perforated Wrapping Paper Company and Seth Wheeler, as the same remain of record and on file in said office and have been stipulated by and between the solicitors for the respective parties.

In testimony whereof I have caused the seal of the said court to be hereunto affixed, at the city of Utica, in the northern district of New York, in the second circuit, this twenty-sixth day of May, in the year of our Lord one thousand eight hundred and ninety and of the Independence of the said United States the one hundred and fourteenth.

Seal of the U. S. Circuit Court, Northern District N. Y.

W. S. DOOLITTLE.

Endorsed on cover: Case No. 14,273. N. New York C. C. U. S. No. 254. The Morgan Envelope Company, appellant, *vs.* The Albany Perforated Wrapping Paper Company and Seth Wheeler. Filed October 14, 1890.

ADDITION TO RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1893.

No. 254.

THE MORGAN ENVELOPE COMPANY, APPELLANT,

vs.

THE ALBANY PERFORATED WRAPPING PAPER COMPANY ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

RECORD FILED OCTOBER 14, 1890.

ADDITION FILED OCTOBER 9, 1893.

(14,273.)

(14,273.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1893.

No. 254.

THE MORGAN ENVELOPE COMPANY, APPELLANT,

vs.

THE ALBANY PERFORATED WRAPPING PAPER COMPANY ET AL.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

INDEX.

	Original.	Print.
Stipulation for addition to record	1	1
Letters patent No. 193,175, granted A. Newbury, assignor, &c., July 17, 1877	3	2
248,323, granted A. W. Jerome October 18, 1881	5	4
285,398, granted B. F. Eaton, assignor, &c., September 25, 1883	9	8
297,618, granted A. C. Moore April 29, 1884	12	10
302,735, granted C. C. Johnson, assignor, &c., July 29, 1884	14	12
302,736, granted C. C. Johnson, assignor, &c., July 29, 1884	18	17
316,368, granted C. C. Johnson, assignor, &c., April 21, 1885	22	20
Defendants' Exhibit No. 13—File-wrapper and contents in the matter of the letters patent No. 325,174, granted Oliver Hewlett Hicks August 25, 1885	24	23

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., OCTOBER 20, 1893.

	Original.	Print.
Petition	24	23
Oath	25	24
Specification	26	24
Decision of examiner, July 30, 1885	31	28
Amendment, July 31, 1885	32	28
Decision of examiner, August 5, 1885	32	28
Amendment, August 6, 1885	33	28
Memorandum of fee paid	33	29
Letter of Commissioner, December 21, 1885	34	29
Memorandum of incomplete application	35	30
Patent	38	31
Contents	40	34
Defendants' Exhibit No. 14—File-wrapper and contents in the matter of the letters patent No. 325,410, granted Oliver Hewlett Hicks September 1, 1885	41	34
Petition	41	34
Oath	42	34
Specification	43	35
Amendment, July 16, 1885	46	37
Examiner's decision, July 28, 1885	46	37
Amendment, July 30, 1885	47	37
Memorandum of fees paid	47	37
Patent	49	38
Examiner's book and contents	50	40
Defendants' Exhibit No. 15—File-wrapper and contents in the matter of the letters patent No. 357,993, granted Oliver Hewlett Hicks February 15, 1887	51	40
Petition	51	40
Oath	55	42
Letter of Hicks to Commissioner, March 16, 1885	56	43
Amendment, March 18, 1885	56	43
Amendment, May 13, 1885	61	46
Amendment, June 2, 1885	63	48
Examiner's decision, June 9, 1885	65	50
Amendment, June 17, 1885	67	51
Examiner's decision, June 26, 1885	69	53
Amendment, July 10, 1885	70	53
Amendment, July 14, 1885	76	57
Examiner's decision, July 29, 1885	77	58
Letter of Church & Church to Commissioner, August 10, 1885	78	58
Letter of Commissioner, August 26, 1885	79	59
Letter of Commissioner, September 4, 1885	81	59
Notice of interference	82	60
Letter of Commissioner, November 25, 1885	84	61
Withdrawal of Hicks	85	62
Assignment division report, January 27, 1887	86	62
Memoranda of fees	86	62
Examiner's book	87	62
Contents	88	63
Patent	91	64
Letters patent No. 273,594, granted Job F. Peacock, March 6, 1883	94	67

	Original.	Print.
Defendants' Exhibit O K Bill No. 20—Bill of Hudson Valley Paper Company	95	69
Defendants' Exhibit Richardson Assignment Morgan Envelope Company—Assignment of Henry B. Richardson to the Morgan Envelope Company, September 30, 1875	96	69
Waiver of certification of interference papers	97	70
Defendants' Exhibit Interference Notice—Richardson, Hicks and Johnson case	98	70
Defendants' Exhibit—Richardson's preliminary statement in interference case with Hicks and Johnson	99	71
Defendants' Exhibit—Hicks' preliminary statement in interference case with Richardson and Johnson	100	71
Defendants' Exhibit—Appeal board's decision in interference case on Johnson's *ex parte* appeal	101	72

1 Supreme Court of the United States, October Term, 1893.

THE MORGAN ENVELOPE COMPANY, Appellant,
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER.
} Term No., 254.

Stipulation.

It is hereby stipulated and agreed that the depositions and exhibits of which the annexed are true copies form parts of the record in the court below; that said depositions and exhibits were omitted through inadvertence and mistake from the transcript certified to this court, and that the said annexed copies are hereby made, and for all purposes are to be deemed and taken to be, parts of said transcript and of the record to be considered by this court.

MELVILLE CHURCH,
JOSEPH B. CHURCH,
Solicitors & Counsel for Appellant.
ESEK COWEN,
Counsel for Appellee.

3 UNITED STATES PATENT OFFICE.

ALONZO NEWBURY, of Coxsackie, New York, assignor to Benjamin F. Eaton, of same place.

Improvement in Paper-holders.

Specification forming part of Letters Patent No. 193,175, dated July 17, 1877. Application filed April 9, 1877.

To all whom it may concern:

Be it known that I, Alonzo Newbury, of Coxsackie, in the county of Greene and State of New York, have invented an improvement in paper-holding cases, of which the following is a specification:

In letters patent, No. 158,203, granted to B. F. Eaton, a cylindrical holder and cover are set forth, in which a roll of paper is introduced and the sheet is pulled out of the desired length and torn off. In this instance the paper is operated by one hand and a swinging blade by the other, against which the paper is torn.

The object of the present invention is to allow the web of paper to be drawn along and torn off at any desired length by the use of one hand only. This object is accomplished by the combination, with the case, of a knife-edge with serrations or points that penetrate the paper as soon as the paper is turned or drawn up against the points, so that the paper is easily torn off against the edge of said knife, and in order to separate the remaining edge from the knife, and allow it to be grasped and drawn forward, a bar is used below the knife, beneath which the paper passes, and hence the edge of the paper is caused to spring away from the knife, and its edge swings forward from beneath the knife sufficiently to facilitate the grasping of the edge.

(Here follows diagram marked p. 2.)

In the drawing, figure 1 is a vertical section transversely of the roll of paper, and Fig. 2 is a plan of the paper holder and knife.

The case is made of a lower portion, *a*, and a cover, *b*. This case is of a suitable size and shape. It may contain only one roll, *c*, of paper, or it may contain two rolls of paper of different widths laid end to end, as in aforesaid patent, and the case may be separate from the frame carrying the knife, as in said patent; or the ends of the case may be prolonged, as at *d*, to receive the knife.

h is the knife, the edge of which is made with serrations or lance-points, and the knife is attached to the bearings *d* in any convenient manner. It is preferable to make the attachment by pivots passing through holes in the bearings and clamped by a set-screw, so that the angle of the knife may be changed to adapt its edges to the character of the paper to be cut.

The paper from the roll is led beneath the bar *l*, and any desired length can be drawn off, after which the outer end of the paper is

A. NEWBURY.
PAPER-HOLDER.

No. 193,175. Patented July 17, 1877.

No 254
Morgan
Envelope Co
&
A. P. H. Paper Co } p. 2

Fig. 1.

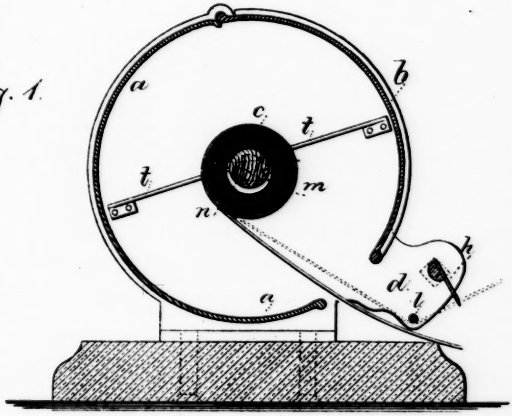
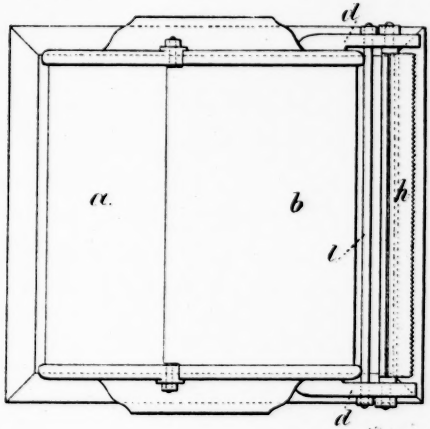


Fig. 2.



Witnesses
Chas. H. Smith
Harold Serrell

Inventor
Alonzo Newbury
per Lemuel W. Serrell
Atty

lifted, so that the web of paper is brought into contact with the serrations of the knife, so as to penetrate the paper, as shown by dotted lines in Fig. 1, and hence a separation will be effected by a continuation of the pull, and it is preferable to draw the paper mostly toward one edge, so as to commence the separation at one side.

As soon as the paper has been cut off the remaining end of the roll becomes detached from the serrations by the spring of the paper beneath the bar *l*, and the edge of the paper swings forward from beneath the knife, so that it may be grasped without risk of injury to the fingers.

This improvement for tearing the paper may be applied to any device for holding the roll or rolls of paper.

There may be inclined flanges *t* inside of the heads of the case, formed with depressions or sockets *n* for receiving the ends of a bar or rod, *m*, upon which the roll of paper may be sustained. These flanges serve as guides in placing the rod *m* into its sockets.

I claim as my invention—

1. The knife *h*, with a serrated edge and attached to the bearings *d*, in combination with the case or holder for a roll of paper, substantially as set forth.

2. The combination of the tearing-knife *h*, bar *l*, and case for holding the roll of paper, substantially as set forth.

3. The inclined flanges *t* attached to the inner surfaces of the heads of the paper-case, and having sockets *n*, in combination with the roll of paper *c*, and its rod *m*, substantially as set forth.

Signed by me this 30th day of March, A. D. 1877.

ALONZO NEWBURY.

Witnesses:

E. RAYMOND.

D. H. DALEY.

5 UNITED STATES PATENT OFFICE.

ALONZO W. JEROME, of Paxton, Illinois.

Device for Tearing Wrapping-paper from Continuous Rolled Sheets.

Specification forming part of Letters Patent No. 248,323, dated October 18, 1881. Application filed March 14, 1881. (No model.)

To all whom it may concern:

Be it known that I, Alonzo W. Jerome, residing at Paxton, in the county of Ford and State of Illinois, and a citizen of the United States, have invented a new and useful improvement in devices for tearing wrapping-paper from continuous rolled sheets, of which the following is a full description, reference being had to the accompanying drawings, in which—

(Here follows diagram marked p. 4.)

Figure 1 is a top or plan view; Fig. 2, an end elevation; Fig. 3, an end elevation, showing the roll of paper mounted in standard, with the rule or straight-edge depending therefrom; Figs. 4 and 5, modifications of the suspending or connecting straps.

The general practice in putting up wrapping-paper for use is in the form of sheets folded usually at the center, and made into packages forming quires and reams. These packages, by reason of the sheets lying flat, are somewhat bulky, occupying more or less space, according to the size or dimensions of the sheets, and causing more or less inconvenience in handling by reason of their bulkiness; and, inasmuch as it is not possible to use the same-sized sheet in all cases and for all purposes, in order to meet the requirements in this respect it is necessary to either have several separate packages containing sheets of different dimensions, the sheets of the same package being all of a uniform size, or else tear from a large sheet a piece of the required size, or as near the size as possible. If several different-sized packages are used, piled one on top of the other, they become mixed up in use, necessitating more or less rehandling and waste of time in order to obtain the one required, and if such packages are laid side by side they are liable to be in the way to a greater or less extent, besides occupying a large amount of space and requiring extra handling; and for these reasons the general custom, when a smaller piece is required, is to tear it from a large sheet. In use in many instances this tearing process is attended with inconvenience and trouble, for the reason that no ready and convenient means are at hand for doing the work.

To obviate the objections pertaining to bulk and handling and rehandling of sheet wrapping-paper, this class of paper has been made in a continuous sheet in the form of a roll, having transverse perforations at regular distances, dividing the continuous sheet into sections or strips of uniform dimensions. This method would be

No. 254
Morgan Envelope Co
v.
A. P. W. P. Co
} p. 4.

(No Model.)

A. W. JEROME.

DEVICE FOR TEARING WRAPPING PAPER FROM CONTINUOUS ROLLED SHEETS.

No. 248,323. Patented Oct. 18, 1881.

Fig. 1

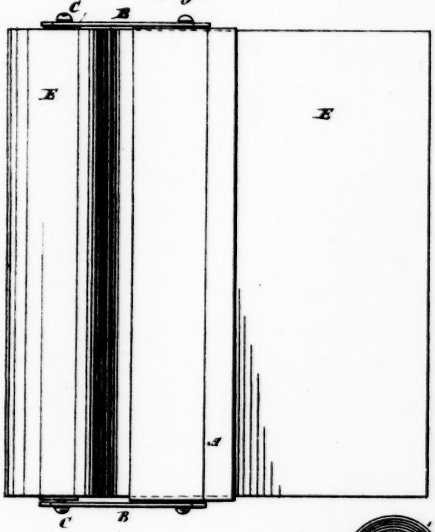


Fig. 4

Fig. 5

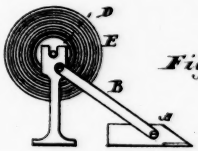


Fig. 3.

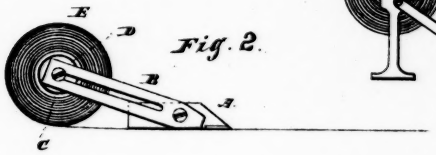


Fig. 2.

Witnesses:
Albert H. Adams.
Oscar W. Bond.

Inventor:
Alonzo W. Jerome

perfectly satisfactory if the sheets were not all of the same size; but in this regard this method is also objectionable, for the reason stated in reference to flat sheets, there being no way of readily subdividing the sheet between the perforations to obtain sheets or pieces of a less size, except by tearing in the same manner as flat sheets.

The object of this invention is to enable wrapping-paper to be put up in a continuous sheet in the form of a roll without any break or division in the sheet by perforations or otherwise to destroy its continuity and entirety, and when so put up allow a subdivision thereof into sheets of any desired size for use to be had by unrolling the precise length of paper required to form such smaller sheet, and tearing the same from the continuous sheet without any trouble, inconvenience, or delay; and its nature consists in providing a straight-edge or rule formed of a flat strip of wood or other suitable material, having its front upper side beveled or otherwise formed to present a sharp edge or face, against which the paper can be drawn and connected with or suspended from the roll of paper or from a roller carrying the paper, or from a support carrying the paper or roller, so as to be at all times in its place and in proper relation to the roll of paper for tearing the unrolled strip from the sheet.

In the drawings, A represents the straight-edge or rule; B, the connecting-straps or hangers; C, the journals or trunnions; D, the roller carrying the paper; E, the roll of paper.

The straight-edge or rule A may be made of a strip of wood or other suitable material, and has, as shown, its front side or face beveled, so as to present a sharp edge or face at its bottom, but this edge or face may be formed in some other suitable manner. Its length is such as to extend transversely across and have its ends project slightly beyond the edge of the sheet to insure the best results in tearing, although the device will work in a satisfactory manner if the ends of the straight-edge or rule come flush or even, or nearly so, with the edges of the paper, and its width is such as to present a bearing-surface for pressing down on the paper
6 and holding it snugly and firmly, so that while the act of tearing is being performed there will be no liability or danger of the paper slipping from beneath it. This straight-edge or rule should be sufficiently rigid, so as not to bend easily in use, and when made of wood its front edge, against which the paper is drawn, may be supported and strengthened by a strip of metal for the purpose of keeping the edge sharp and preventing it from being indented or splintered in use, which metal strip may be secured to the under face of the straight-edge or rule by rivets or otherwise, so as to project properly and protect the edge or form the edge proper. At each end of this straight-edge or rule, in the form of construction and arrangement shown, is pivotally attached the lower end of a strap or hanger, B, which straps have a backward and upward inclination at the same angle; and the body of each strap or hanger is provided with a longitudinal slot to receive the journals or trunnions C of the roller D.

The roller D may be made of wood or other material on which a continuous sheet of paper can be wound to form a roll, E. Each

end of this roller is provided with a journal or trunnion, C, formed, as shown, by a screw which passes through the slot of the adjacent strap or hanger B, and enters the end of the roller, so as to connect the straight-edge or rule with the roller and have it always at hand and ready for use.

The slotted straps or hangers shown, for connecting the straight-edge or rule with the rollers, are specially intended for use where the roll of paper rests directly on the counter or other place where the wrapping is being done, and are so made for the purpose of allowing the roll, which as the paper is unwound therefrom gradually decreases in size, to rest continuously on the counter or other place without bearing down on the straps or hangers as it decreases in size, the journals C as the roll decreases in size sliding down in the slots for the purpose of making this adjustment. This result can also be obtained by the pivotal connection of the straps with the straight-edge or rule, in which case the slots can be omitted and the straps or hangers be provided with a suitable opening to receive the journals or trunnions, the straps or hangers in such case turning on the rule-pivot, and their upper ends falling with the roller.

Instead of allowing the roll of paper to rest on the counter or wrapping-place, such roll can be supported in uprights, standards, or other support secured to the counter or wrapping-place, the standards or uprights being located at a sufficient distance apart for the roll to be dropped in between them, and having their upper ends slotted or otherwise formed to receive the journals or trunnions C. When so supported the straight-edge or rule can be connected with or suspended from either the standards or the journals of the roller. When connected with or suspended from the standards the connecting straps or hangers are to be pivoted at their upper ends to the standards or other support, either permanently or removably, and when connected with or suspended from the journals or trunnions the upper ends of the straps or hangers are to be so formed as to be readily slipped onto the journals or trunnions, and the hangers need not be slotted, and may be of any form or shape suitable for the purpose.

In use the end of the paper is unwound from the roll and passed under the straight-edge or rule until the length of paper for the required size of small sheet is reached, when by pressing down on the straight-edge or rule and holding it firmly against the paper beneath it the piece unwound and in front of the straight-edge or rule can be torn off by drawing the paper against the sharp front edge. By this arrangement any desired sized sheet of paper can be readily and easily torn off. The means for doing the work is always at hand and ready for use, and the work can be done without any waste of time and without any inconvenience or delay, as all that is necessary to be done is to draw the end of the paper under the straight-edge or rule and draw it against the edge thereof.

Screws are not the only form of pivot or journal that can be used. Such pivots or journals might be in the form of trunnions driven into the end of the roll, or in the form of a plate with a center stud thereon, the plate being secured to the end of the roller by screws or otherwise; or they might be in the form of a rod passing longitudinally through the roller or roll of paper.

It is not the intention to wind the paper on a roller, although this might be done at the factory. One roller is intended for use with a number of rolls of paper by being inserted in the opening of such roll. This roller need not extend entirely through the paper. Short pieces, to enter the roll-opening at the end and secured rigidly or otherwise to the ends of the side straps can be used, such pieces being of a diameter to correspond with the opening in the roll, or of a less diameter. This form of construction is shown in Fig. 4, in which each upper trunnion or pivot is rigid on the side strap, and is designed to receive a piece to enter the end of the roll-opening, or to enter such opening itself. In Fig. 5 a form of side strap made of a single piece of wire or other material is shown, the wire or other material being bent at its upper end to form a pivot or trunnion, and having at its lower end a loop or opening for the pivot or attaching device of the rule or straight-edge. These straps might also be so formed as to have a slight spring for the purpose of keeping their upper connection in engagement with the roll of paper when connected directly therewith.

Fig. 3 shows a roll of paper mounted in standards, and the rule or straight-edge suspended from the upper end of the standards by the straps. This construction will be found desirable when the roll of paper is large and heavy.

7 When the paper of a roll is all worked up the straight-edge or rule, with its connecting or suspending devices are to be applied to another roll and used in the manner described, one rule and its devices being designed for use with a number of rolls of paper, it not being the intention to provide each roll with a separate tearing device, although this could be done, if desired.

When connected directly with the roll of paper the upper ends of the side or suspending straps may be provided with a broad circular disk or plate to form bearings for the ends of the paper, and these disks may have center studs or projections to enter the roll-opening and make the attachment; but the device can be used with the form of construction shown in Figs. 3 and 4, the pivots at the end of the straps passing directly into the roll-opening.

What I claim as new, and desire to secure by letters patent, is as follows:

1. The combination, with a journaled roll for wrapping-paper, of the sustaining straps or hangers B B and the transverse straight-edge A, arranged to rest directly on the paper when in use, and having its ends pivoted to the lower portions of the straps or hangers, substantially as and for the purposes described.

2. The combination, with a roll for wrapping-paper, of the standards, in the upper ends of which the roll of paper is journaled, the sustaining straps or hangers B B, pivoted to said standards, and the straight-edge A, having its ends pivoted to the lower portions of the straps or hangers, substantially as and for the purposes described.

ALONZO W. JEROME.

Witnesses:
O. W. BOND.
ALBERT H. ADAMS.

9 UNITED STATES PATENT OFFICE.

BENJAMIN F. EATON, of Coxsackie, New York, assignor, by mesne assignments, to the Union Cabinet and Paper Company, of Boston, Massachusetts.

Paper-holder.

Specification forming part of Letters Patent No. 285,398, dated September 25, 1883. Application filed January 22, 1883. (No model.)

To all whom it may concern:

Be it known that I, Benjamin F. Eaton, of Coxsackie, in the county of Greene and State of New York, have invented an improvement in paper-holders, of which the following is a specification.

In letters patent No. 193,175 and reissue No. 7087 paper-holders are represented for containing a roll of paper, and a knife with serrated edge is also shown.

My present invention relates to the combination, with the device for holding a roll of paper, of an oscillating serrated knife which swings by the pressure upon it of the paper as it is torn off, and the knife turns up automatically out of the way when the pressure is relieved, thereby preventing the edge of the knife remaining in a position to injure the person or clothing of the party handling the same or passing closely thereto. It is to be understood that these paper-holders are hung up against a wall in water-closets or placed upon or under a counter or shelf, and that there is a risk of personal injury in cases where the serrated edge of the knife stands out toward a person. By my improvement I swing the knife up vertically where its edge is out of the way.

(Here follows diagram marked p. 8.)

In the drawings, figure 1 is a vertical section of my paper-holder, and Fig. 2 is an elevation of the same.

The frame, composed of the side pieces, *a a*, and cross-bars *b c*, is hung up against a wall or other place by the head-bar *d*, having hooks *e*, that grasp over the bar *b*, said hooks and bar forming pivots for the side frames, *a*, and screws are employed for holding up the head-bar *d*. The frame swings on the pivots, so as to accommodate the size of the roll of paper. The paper in the form of a roll, *f*, is upon a wooden roller, with an axle or pin, *g*, that passes at its ends into the slotted check-pieces of the frame *a*, and there is a strip of rubber or elastic webbing, *h*, extending from the bar *c* to the bar *b*, which elastic presses against the roll of paper, to prevent its unwinding accidentally, and also to prevent the loose end of the paper falling back where it could not easily be grasped in drawing such paper forward before cutting it off. The roll hangs against this elastic, and the wall or service to which the holder is hinged.

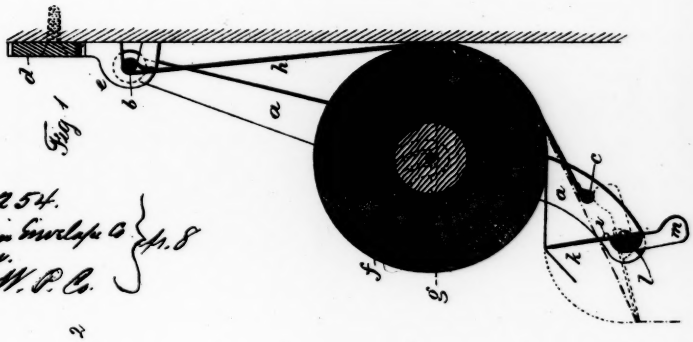
(No Model.)

B. F. EATON.

PAPER HOLDER.

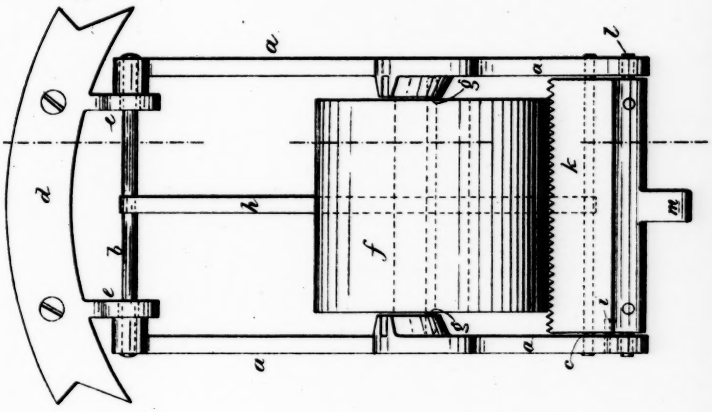
No. 285,398. Patented Sept. 25, 1883.

Fig 1



No. 254.
Morgan Envelope Co
A. P. W. P. Co.
Sp. 8

Fig 2



Witnesses
J. Stail
Chas. H. Smith

Inventor
Benjamin F. Eaton
per Lemuel W. Serrell
Atty

The serrated knife *k* is made of a blade of steel, with an edge of numerous sharp points. This knife is upon an axis or pin, *l*, so that it swings freely thereon. The counter-weight *m* keeps the knife upright, or nearly so, with its edge out of the way of a person standing near the paper-holder or using the same. A stop, *i*, limits the movement when turned up into its normal position, and when turned down for use into the position shown by dotted lines in Fig. 1 the counter-weight comes into contact with the bar *c*. When the paper is drawn upon to pull off the required amount from the roll, the knife swings forward, if the paper is in contact with it, and when the paper is to be torn off it is to be drawn down upon the serrations or points of the cutter, so that they penetrate the paper and separate the same. This swinging knife may be applied to a paper-holding case such as shown in my aforesaid patents, instead of to the frame shown, and a knife pivoted so as to swing as aforesaid might be made with a smooth edge, instead of being serrated, if desired. As soon as the pressure on the paper is relieved, the knife swings up automatically by the action of the counter-weight; and I remark that a spring may be applied in any convenient manner to take the place of the counter-weight. The knife, turning up beneath the end of the sheet of paper raises the same and leaves the end projecting in a position that allows of its being easily grasped and drawn out previous to being again torn off.

I claim as my invention—

1. In combination with a holder for a roll of paper, a knife with serrations or points on its edge, an axis for the knife to swing on, and a counterpoise to bring the knife into a nearly vertical position when not in use, substantially as set forth.

2. The frame formed of the side pieces, *a a*, and cross-pieces *b c*, in combination with the head-bar *d*, the axle for the roll of paper, and a swinging knife below the roll of paper for the paper to be torn against its edge, substantially as set forth.

3. The knife and the means for supporting a roll of paper, in combination with the elastic strip *h*, in contact with said roll of paper, for the purposes and substantially as set forth.

4. The combination, with the roll of paper and means for supporting the same, a knife, pivots for the same to swing upon, and a weight or spring to swing the edge of the knife up toward the roll of paper, substantially as set forth.

Signed by me this 17th day of October, A. D. 1882.

BENJAMIN F. EATON.

Witnesses:

A. C. DWIGHT.

G. H. RICHTMYER.

12 UNITED STATES PATENT OFFICE.

ALBERT CANDY MOORE, of Bellows Falls, Vermont.

Paper-holder.

Specification forming part of Letters Patent No. 297,618, dated April 29, 1884. Application filed December 26, 1883. (No model.)

To all whom it may concern:

Be it known that I, Albert Candy Moore, of Bellows Falls, in the county of Windham, of the State of Vermont, have invented a new and useful improvement in water-closet-paper holders; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

(Here follows diagram marked p. 11.)

Figure 1 is a perspective view, Fig. 2 a transverse section, and Fig. 3 a longitudinal section, of a paper-holder containing my invention, the nature of which is defined in the claims hereinafter presented.

The holder is to support a roll of paper and to enable portions thereof to be separated from the remainder in manner and by means as described and as occasion may require.

The holder is represented as adapted to such a roll, which in the drawings is shown at A as wound upon a tube or cylinder, *a*, of wood, into the ends of which the journals *b b* of the legs *c c* of the bail B are inserted. This bail, formed of wire, bent as shown, has pivoted to it, at its middle, a screw, C, or some other proper device for fastening it to a wall.

A combined knife, *e*, and brake *f*, formed of sheet metal, bent as represented, is shown at D as secured to the bail by arms *d d*, extending from them and pivoted to it, so as to enable the brake to rest against the periphery of the roll of paper. The brake makes an angle of about ninety degrees with the knife, whose cutting-edge is its outer edge, the blade of the knife being by preference bent upward, as shown, just in rear of the said cutting-edge. This brake with the arms may be in one piece of wire, or it may be the back of the knife; but it is preferable to have it formed and arranged with the knife in manner as represented. There extends between the arms, and directly over and parallel with the brake and knife, a rung or guide, *g*, between which and the brake and over the knife the paper from the roll is to extend in manner as represented at *h*. Having drawn forward the paper sufficiently from the guide, the paper is to be borne down upon the cutting-edge of the knife so as to depress the knife and crowd the brake against the roll, whereby the said roll will be stopped from revolving while the paper may be severed or cut by the knife. The part of the paper that may lap on the knife will remain intact, ready

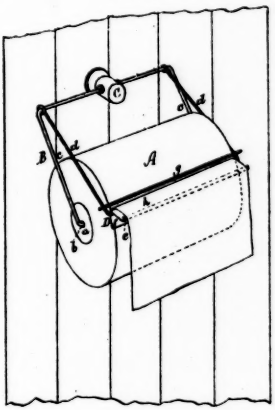
(No Model.)

A. C. MOORE.

PAPER HOLDER.

No. 297,618. Patented Apr. 29, 1884.

Fig. 1.



No. 2.54
Morgan Envelope Co.
A. P. W. Co.

Fig. 3.

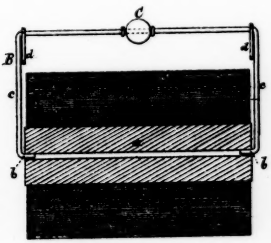


Fig. 2.

Witnesses
J. N. Pierce
E. B. Pratt

Inventor.
Albert Candy Moore.
by R. W. Gray atty

for being seized, for the purpose of drawing forward over the knife more of the paper of the roll, such roll, while paper is being so drawn from it, turning freely on the journals of the bail.

I do not claim a paper-holder constructed and to operate as represented in the United States patent No. 193,175, my paper-holder having one or more appliances not incident thereto. Nor do I claim paper-holders made as represented in the United States patents Nos. 248,323 and 285,398, for in neither of such patents is a brake shown as fixed to the knife or cutter, and by it caused to bear against the roll of paper while a part of such roll is being severed from the rest by the knife.

I claim—

1. The knife connected to the bail and provided with a brake to extend from it, the said knife, against the roll of paper, and to be borne against it by the draft of the strip of paper on the knife while the latter may be in the act of separating the paper, all being substantially as set forth.

2. The bail provided with the guide and knife, arranged as set forth, and with a brake to extend from the knife against the roll of paper, all being substantially and to operate as represented.

3. The combination of the bail provided with the supporting screw or device, with the knife and brake arranged and connected with each other as described, and connected with the bail by ams applied therreto, as set forth.

ALBERT CANDY MOORE.

Witnesses:

R. H. EDDY.

E. B. PRATT.

14 UNITED STATES PATENT OFFICE.

CHARLES C. JOHNSON, of Springfield, assignor to Horace W. Thompson, of Westminster, Vermont.

Holder and Cutter for Web-paper.

Specification forming part of Letters Patent No. 302,735, dated July 29, 1884. Application filed May 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, Charles C. Johnson, of Springfield, in the county of Windsor and State of Vermont, have invented certain new and useful improvements in holders and cutters for web-paper; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

Previous to my invention contrivances of various constructions have been devised for holding rolls or wound webs of paper, some of which had for their object to facilitate or convenience merely the unwinding and tearing off of portions of the web of paper as it might be desired for use for any purpose, and others of which have been adapted not only for this purpose, but also to readily effect the severance or cutting of the web of paper at any desired point, as larger or smaller portions of the web might be required for use. In some of these contrivances as heretofore made the web of wound paper has been supported axially by some sort of reel-like device, while in others it has been simply contained within a box or receptacle; and in some of said previous contrivances the web of paper employed has been manufactured or prepared with rows of perforations running crosswise of the web and arranged equidistant, for the purpose of predetermining the lines at which a severance of the material might be easily effected, while in others a plain web of wound paper has been used, and some sort of cutting device or severing-knife has been employed to facilitate the cutting off of pieces of the web of any desired length.

My present invention relates to that type of contrivances for conveniently using portions of a wound web of paper in which some sort of severing-knife or device is employed, and in which the roll of paper is simply contained within a suitable box-like receptacle.

Heretofore, so far as my knowledge of the art extends, no contrivance in the way of a paper-holder provided with some suitable means for effecting a severance of the web of paper, so as to separate therefrom pieces for use, has been constructed so that only pieces of a uniform and predetermined length could be separated from the supply web or roll.

I propose to provide for use a contrivance in the use of which only a given predetermined amount of the paper can be unreeled and cut off at any single operation of the machine; and to this main end and object my invention may be said to consist, essentially, in the com-

No. 254
Morgenthau Exhibit No. 19
A. P. W. P. Co.

(No Model.)

C. C. JOHNSON.

HOLDER AND CUTTER FOR WEB PAPER.

No. 302,735. Patented July 29, 1884.

FIG. 1.

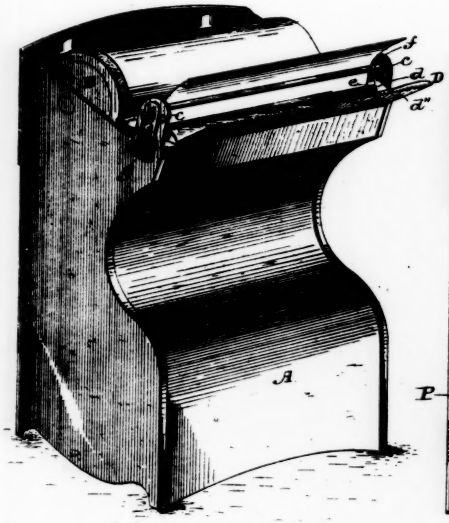


FIG. 2.

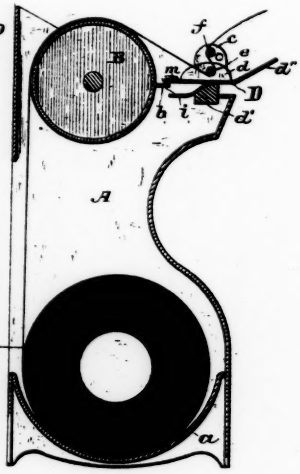


FIG. 3.

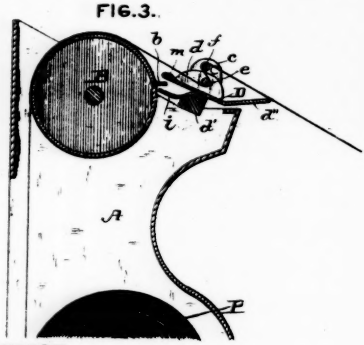
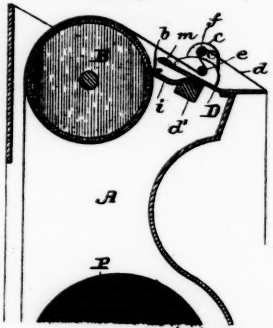


FIG 4.



ATTEST.
J. Henry Kaisel
Geo. P. Smallwood

INVENTOR.
Charles C. Johnson
By J. N. McGuire
Atty.

bination, with any suitable means for holding the supply-roll and some sort of device or mechanism for cutting or assisting in the severance of the web of paper, of a suitable measuring or controlling device operating in conjunction with the cutting mechanism, so that whenever a given quantity of the web shall have been drawn off for the purpose of separating it from the main supply the cutting mechanism must be brought into operation and the drawn-off portion of the web severed from the rest of the paper before a further supply can be obtained from the roll or wound web.

To enable those skilled in the art to which my invention relates to make and use the same, I will now proceed to more fully describe it, referring by letters of reference to the accompanying drawings, which form part of this specification, and in which I have illustrated my invention carried out in that form in which I have so far successfully practiced it.

(Here follows diagram marked p. 13.)

In the said drawings, figure 1 is a perspective view of my improved paper-holder and cutting contrivance, with the parts and the web of paper illustrated in the condition in which they would appear immediately after the severance of a piece of paper from the main reel or supply-web. Fig. 2 is a vertical central section showing the contrivance under the same conditions. Fig. 3 is a similar section, (the lower portion of the contrivance, however, being omitted,) but showing the paper drawn off or unreeled preparatory to the severance of the piece to be cut off. Fig. 4 is a view similar to that shown in Fig. 3, but with the paper shown as pulled down against the cutting-knife, and with the parts in the positions in which they would be during the cutting operation.

In the several figures the same part will be found designated by the same letter of reference.

A is a simple box-like case of any desired design, and of a suitable size to contain in its lower portion, and resting upon its semi-cylindrical bottom *a*, the roll or wound web of paper P. This box or case A is preferably made open at its back side, for a purpose to be presently explained, and is adapted to have its rearmost portion secured by any suitable devices or means to any wall or partition where it may be desired to fasten up the contrivance for the use of the paper. In the upper part of said case A, and near to its top opening, is suitably mounted to turn freely on its axis a cylinder or measuring-drum, B, which is provided with a radially-projecting rib or flange, *b*, that is about equal in length to the length of the roll, and projects from the periphery of the roll to a suitable extent to operate in conjunction with certain devices connected with the cutting mechanism, in a manner to be presently explained. Forward of the measuring-roll is pivotally hung in projecting ear portions *c c* of the case a rocking or tilting cutting and regulating device, D, which, in the case shown, is made of a piece of sheet metal having upwardly projecting or bent portions *d* at either end, through which passes a shaft, *e*, on which said cutting and regulating device is hung, the

said shaft being supported at either end by the upwardly-projecting stands of the case A, as clearly shown. In suitable holes in these stands is also supported a removable shaft or rod, *f*, which by preference is held in place by a turn-button, *g*, as illustrated. The outer or forward portion of the device D is bent or inclined slightly upwardly, as seen at *d''*, and has its extreme edge sharpened and serrated to render it capable of easily severing the web of paper. The rearmost portion, or that part of the rocking device D which is nearest to the measuring-roll B, is formed or provided with a lip-like device, *i*, which preferably extends throughout its whole length, and it is arranged, as shown, a short distance below the rear edge, *m*, of said rocking device. This lip-like device *i* projects to such an extent and is so arranged relatively to the periphery of the measuring-roll B and its projecting rib or flange that when the rocking device D has its rear portion in the lowermost position the said rib of the cylinder B will perfectly clear it as the cylinder rotates, but so that when the rocking device shall have its rearmost portion elevated said lip-like device *i* will come so near to the periphery of the roll B as to form a stop, against which the projecting rib of said roll will come, in a manner and for a purpose to be presently explained. The rocking or tilting device D is weighted, or otherwise so constructed and arranged that when left free its rearmost portion will always occupy the lowermost position.

In the use of the contrivance, the web of paper is placed in the lower part of the case, and an unwound portion is passed thence upwardly near the back side of the case and partially around the periphery of the measuring or regulating cylinder B; thence under the shaft or rod upon which, as shown, the tilting or rocking device D is hung; thence backwardly under and upwardly past the shaft or rod *f*, all as fully illustrated at Figs. 1 and 2 of the drawings; and in drawing off and cutting or severing portions of the web for use the operation of the contrivance is as follows: Supposing the web of paper and the parts of the machine to be in the condition and positions seen at Figs. 1 and 2, the projecting or free end of the web of paper is grasped and pulled off in the direction and manner illustrated at Fig. 3 until the projecting rib of the cylinder B comes around and into contact or engagement with the lip-like projection *i* of the rocking device D, which will now have been elevated by the rocking of D, caused by the slight downward pull of the paper being drawn off against the cutting device. This changed condition of the parts will occur when the cylinder B shall have made one revolution, and the parts now being brought to a chock, or dead-lock, the portion of the paper or web drawn off is easily cut or severed by pulling it hard down onto the cutting device, as illustrated at Fig. 4, and at the same time giving the portion of the paper grasped by the hand of the user a slight pull or jerk sidewise of the web. The instant this cutting operation shall have been effected so as to free the cutting end of the paper forming part of the supply-roll, the rocking device D will, by gravity, reassume the position illustrated at Fig. 2, whereby the projecting lip-like device *i* is lowered to a position such that the cylinder B will be free to

make another revolution when desired. In consequence of the passage of the web in a sort of intertwined manner between and partially around the two shafts or rods *e* and *f*, as shown, the free end of the web, after a piece of paper has been cut off, will naturally assume the position shown at Figs. 1 and 2, and thus be in a convenient condition to be grasped by the hand of a person when it may be desired to again operate the contrivance. These two rods, with the paper thus intertwined about them, also perform the function of exerting a sort of tension on the web, so that in pulling off the paper it will not come too easily, and so that the proper force may be applied by pulling the web downward at the same time onto the tilting or rocking device D, to throw its rearmost portion upward, and through the medium of the projecting device *i* effect the stoppage or chocking of the measuring-cylinder B. In the case shown I have provided the rear portion of the rocking or tilting device D with a weight, *d'*, and the combined arrangement of the various parts shown is such that the forward bottom portion of the tilting plate D comes to a stop on the front
16 upper edge of the case A, while the extent of motion of said device D in the opposite direction is limited by the weight or under portion of the rocking device coming to a stop against the inner surface of the case A; but all these details of construction may of course be infinitely varied, and the forms, as well as the sizes and proportions of all the devices, may be modified in various ways without departing from the spirit of my invention, the gist of which lies in the use, in connection with a cutting mechanism and some suitable means for supporting the supply-roll, of a measuring or regulating device coacting with the cutting mechanism in such manner that whenever a given quantity of the paper shall have been drawn off the action of the parts preliminary to the cutting operation shall effect a stoppage of the supply, and at the same time lock the moving parts, so that the force applied to the paper pulled off will operate to perform the cutting of the paper.

If deemed expedient, the roll of paper may be axially supported in any suitable manner, in lieu of resting in a receptacle such as shown. By a placement of the upper guide and tension rod in different positions relatively to the lower rod or shaft, a greater or less tension may be applied to the web of paper; and, if found desirable, the periphery of the measuring and regulating cylinder B may be of such a character, or may be so roughened, as to prevent the possibility of any accidental slip of the web on the cylinder without turning the latter, whereby the designed operation of the contrivance so as to permit the drawing off only at each operation of a given quantity of paper might be rendered imperfect.

Having now so fully explained the construction and operation of my improved contrivance that those skilled in the art can make and use machines containing my invention, and wishing to be understood that I do not limit my claim to any precise construction, so long as the principle of operation pointed out shall be involved in the machine, what I claim as new, and desire to secure by letters patent, is—

In combination with suitable means for the support of the supply-roll of paper and a severing or cutting device or mechanism, a measuring or regulating device, arranged substantially as described, whereby the preliminary action of the cutting mechanism, caused by a downward pull of the web on the knife, shall operate to stop the measuring and regulating device, substantially as set forth, so that pieces of a given length only will be unreeled and cut off.

In witness whereof I have hereunto set my hand this 17th day of May, 1884.

CHARLES C. JOHNSON.

In presence of—
JUSTUS DARTT.
A. M. ALLBE.

(No Model.)

C. C. JOHNSON.

HOLDER AND CUTTER FOR WEB PAPER.

No. 302,736. Patented July 29, 1884.

No. 254
Morgan Envelope Co
N. Y.
A. P. W. P. Co. } p. 17

FIG. 1.

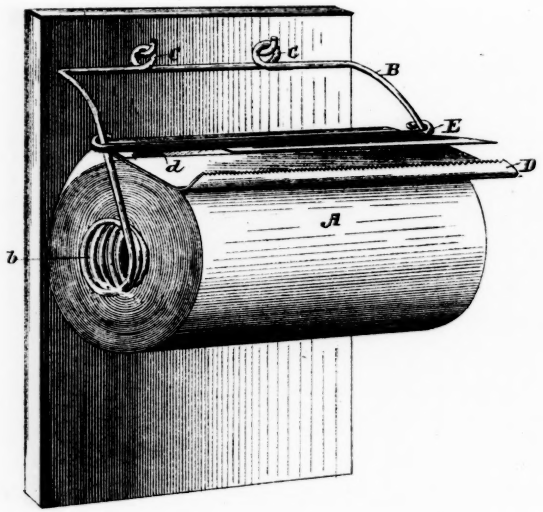


FIG. 2.

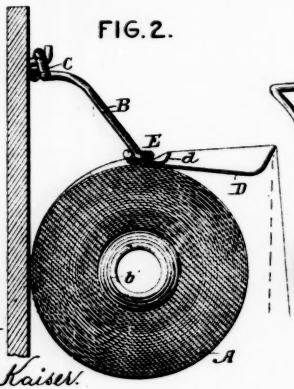
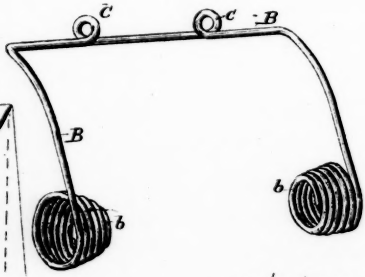


FIG. 3.



ATTEST
J. Henry Kaiser.
Geo. T. Smallwood.

INVENTOR.
Charles C. Johnson
By J. N. McGuire
Atty.

18 UNITED STATES PATENT OFFICE.

CHARLES C. JOHNSON, of Springfield, assignor to Horace W. Thompson, of Westminster, Vermont.

Holder and Cutter for Web-paper.

Specification forming part of Letters Patent No. 302,736, dated July 29, 1884. Application filed May 22, 1884. (No model.)

To all whom it may concern:

Be it known that I, Charles C. Johnson, of Springfield, in the county of Windsor and State of Vermont, have invented certain new and useful improvements in holders and cutters for web-paper; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to that class of paper holders and cutters adapted to support the rolls or wound webs of paper axially, and provided with some sort of cutting or severing device, by means of which a piece of any desired length may be unwound from the web, and conveniently and readily severed therefrom for use.

Previous to my invention paper holders and cutters of this type have been made of various constructions, the most of which have been more or less complicated, and more or less deficient or undesirable in practical operation.

My invention has for its main objects to provide for use a contrivance of the type mentioned, which, while it shall be simple and economic of manufacture, shall be exceedingly efficient in its practical operation; and to these main ends and objects my invention consists in the novel devices and combinations of devices, which will be hereinafter more fully described, and which will be particularly pointed out and defined in the claims of this specification.

To enable those skilled in the art to make and use my invention, I will now proceed to more fully describe the construction and operation of a machine embodying the several features of my improvement, referring by letters to the accompanying drawings, which form part of this specification, and in which I have illustrated my invention carried out in that form in which I have so far successfully practiced it.

(Here follows diagram marked p. 17.)

In the drawings, figure 1 is a perspective view showing the parts of the contrivance and the web of paper in the conditions in which they would appear when ready for use. Fig. 2 is a vertical section, with a portion of the web pulled off ready to be severed from the main supply. Fig. 3 is a perspective view of the web-sustaining reel or bail-like support separated from the web and from the other parts of the contrivance.

In these several figures the same parts will be found designated by the same letters of reference.

A represents an ordinary roll or wound web of water-closet paper, which is mounted upon the helically-wound plug-like portion *b* of the wire bail-like frame B. This bail-like frame is preferably made (by turning the wire) with two eyes, at C C, to facilitate the fastening up or hanging up of the bail against any wall or partition where the contrivance is to be used, as illustrated.

D is a combined cutting-knife and roll-brake, which is preferably made, as shown, of sheet metal, with its forward cutting-edge bent upwardly and serrated in a manner well understood, to facilitate the severance of the paper. This cutter and brake D is formed with two notches or indentations at either end and near its back edge, which engage, as shown, with the nearly vertical portions or side bars of the bail or roll-support B; and a short distance forward of the points where the device D engages with the side bars of the bail said device is provided with an upwardly-projecting rib or flange, *d*, in rear of which rests upon the device D, by gravity, a presser-bar or tension-bar, E, which is preferably formed of a piece of wire, the ends of which are bent into hook-like or eye form, so as to engage with the side bars of the bail B in such manner as to permit the said presser-bar to freely slide up and down on said bail.

In fitting the contrivance for use, the side bars of the bail are sprung apart, so as to permit the engagement with the central hole of the roll of paper of the plug-like portions *b* of the bail. The sliding knife and brake device D is then permitted to descend and rest on top of the roll of paper, the free end of the paper being passed over said device D, and the presser-bar E is then allowed to descend on top of the projecting portion of the paper web, all as clearly illustrated in the drawings.

19 In the use of a contrivance such as shown, and so far described, the operation is as follows: When it is desired to use some of the paper, the free or projecting end of the web is grasped, and any desired quantity is pulled off in the direction indicated at Fig. 2. Then by pulling the drawn-off portion of the web downwardly, as indicated by dotted lines at said figure, and pulling on the web, the initial effect is to pull the device D down onto the upper portion of the periphery of the paper roll with a force due to the pull on the paper augmented by the leverage exerted by the device D, since the pull of the paper on the serrated edge of D acts to force the plate D down onto the roll near its rearmost edge and slightly in advance of the fulcral line at which said plate is engaged with the side bars of the bail B. A slight sidewise pull on the paper thus effects the complete severance of the pulled-off portion from the rest of the web by the action of the serrated edge of the device D, and the free end of the cut web naturally assumes the position seen at Fig. 1 by reason of the action of the presser-bar E, which, exerting its weight on the paper immediately in rear of the upwardly-projecting rib or flange *d*, causes the paper to assume the position shown, and leaves its free end in a most convenient condition to be again grasped for another operation of the machine.

It will be seen that by the construction of the holder B of a single piece of wire, with the tapering coils *b*, an exceedingiy cheap and efficient means for supporting the roll of paper is provided, and one to which the rolls of paper for use may be alternately supplied in a most convenient manner by simply springing apart the lower ends of the wire bail and inserting the tapering coils in the axial aperture of the roll.

By making the device D with simple notches at either end to engage with the side bars of the bail, as shown, said device may be slid up on the side bars of the reel, out of the way, for the ready insertion of a fresh roll of paper; and in fact may, if desired, be entirely removed from the bail. The presser-bar E operates sufficiently for the purpose explained, and the action of the device D is such, it will be understood, that in drawing off portions of the web it excites a slight tension on the paper, so that it will not be pulled off too easily, and then when the web is pulled down to perform the cutting operation it acts initially, as already explained, as a sort of lever-brake on the roll.

Of course the precise forms, as well as the sizes and proportions of the parts, may be varied more or less without changing the principle of construction or mode of operation of the machine, and hence without departing from the gist of my improvements.

What I claim as new, and desire to secure by letters patent, is—

1. In combination with a bail-like holder for supporting the roll or wound web of paper, a cutting bar or device which rests by gravity on top of the roll, and which acts, as described, as a lever-brake to retard the rotation of the roll by the pulling action on the free end of the paper necessary to do the cutting.

2. A bail-like roll-holder formed with integral tapering plug-like portions *b*, substantially as and for the purposes described.

3. In combination with a roll-supporting device or holder, a cutting and braking device free to descend by gravity as the size of the roll becomes reduced, and a presser-bar resting on top of the free portion of the web, and in rear of an upwardly-projecting rib or flange on the combined brake and cutter, all substantially as and for the purpose described.

In witness whereof I have hereunto set my hand this 17th day of May, 1884.

CHARLES C. JOHNSON.

In presence of—
JUSTUS DARTT.
A. M. ALLBE.

22 UNITED STATES PATENT OFFICE.

CHARLES C. JOHNSON, of Springfield, assignor to Horace W. Thompson, of Westminster, Vermont.

Paper Holder and Cutter.

Specification forming part of Letters Patent No. 316,368, dated April 21, 1885. Application filed September 29, 1884. (No model.)

To all whom it may concern:

Be it known that I, Charles C. Johnson, of Springfield, in the county of Windsor and State of Vermont, have invented certain new and useful improvements in web holders and cutters; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this application.

My invention relates to certain new and useful improvements in contrivances for holding wound webs of paper and for facilitating the tearing of portions of the web for use as may be required. Such contrivances are sometimes designated "holders and cutters for web paper," and may be used either for water-closet paper or for wrapping-paper in stores or warehouses. An instance of such contrivances may be seen in United States letters patent No. 302,736, granted to myself July 29, 1884, and the main novel feature of my present invention may be applied, if desired, to such a contrivance as seen in my said letters patent.

My present invention consists, primarily, in the use, in connection with a bar or device provided with a cutter for severing the paper web, of a drag-bar arranged to co-operate with the rearmost portion of said cutter-bar in such manner as to throw the cut and exposed end of the web upwardly or into a position in which it may be most conveniently grasped whenever it may be desired to pull off a fresh supply of paper for severance and use; and my invention consists, secondly, in certain novel devices and combinations of devices which will be hereinafter more fully described, and which will be specifically pointed out in the claims of this specification.

To enable those skilled in the art to make and use my invention, I will now proceed to more fully describe the same, referring by letters of reference to the accompanying drawings, which make part of this specification, and in which I have shown my invention carried out in those forms in which I have so far successfully practiced it.

(Here follow diagrams marked pp. 20 & 21.)

In the drawings, figure 1 is a perspective view of my improved paper holder and cutter, showing the same in that form which is best adapted to the use of webs of paper—such, for instance, as toilet-paper—to be hung or fastened up against the side of a wall or

(No Model.) 2 Sheets—Sheet 1

C. C. JOHNSON.

PAPER HOLDER AND CUTTER.

No. 316,368 Patented Apr. 21, 1885.

No. 254
Morgan Envelope Co. p. 20.
A. P. W. P. Co.

FIG. 1.

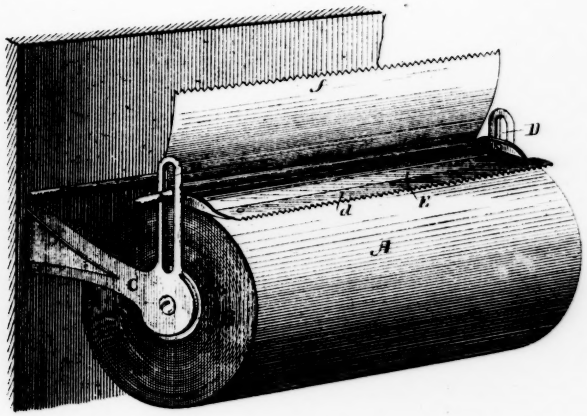


FIG. 2.

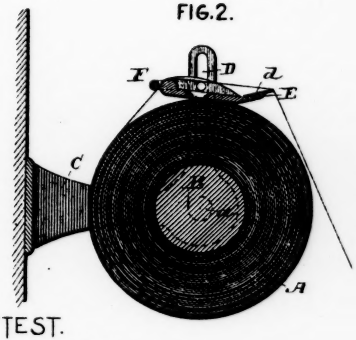
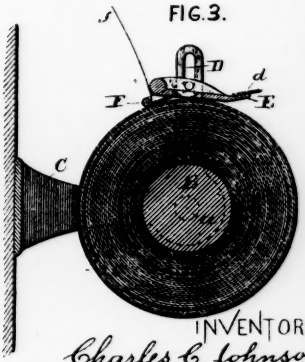


FIG. 3.



ATTEST.
J. Henry Kaiser.
Harry L. Amer.

INVENTOR.
Charles C. Johnson
By F. N. McGuire
Att'y.

(No Model.) 2 Sheets—Sheet 2.

C. C. JOHNSON.

PAPER HOLDER AND CUTTER.

No. 316,368. Patented Apr. 21, 1885.

No. 254.
Morgan Envelope Co. Apr. 21
v.
A.B.W.P.Co.

FIG. 4.

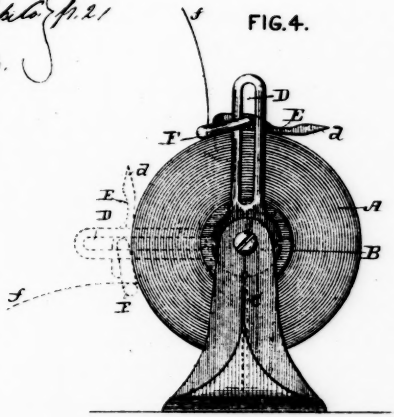
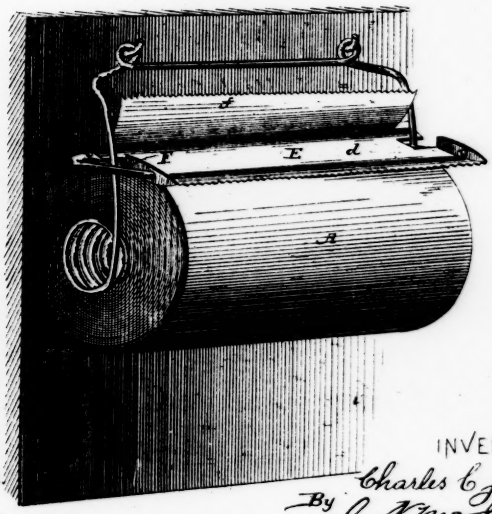


FIG. 5.



ATTEST.
J. Henry Kaiser
Harry L. Amer

INVENTOR.
Charles C. Johnson
By J. E. McGuire
Atty

partition. Fig. 2 is a cross-section of the same but with the end of the paper web drawn off and pulled down over the cutter, ready for severance. Fig. 3 is a similar cross-section but showing the condition and relationship of the end of the web, the cutter-bar, and the drag-bar after the severance of a portion of the web. Fig. 4 is an end view of another form of roll-frame or reel-support in which said frame is provided at each end with adjustable slotted arms or extensions, so that said frame may be conveniently secured to a store-counter or to any horizontal support, or may be adjusted for use under the same circumstances for which the contrivance shown at Figs. 1, 2, and 3 is designed. Fig. 5 is a perspective view showing another modification of my invention and one in which the roll of paper is supported by a wire bail-like device, such as seen in my United States patent No. 302,736.

In the several figures of the drawings the same part will be found designated by the same letter of reference.

Referring now more particularly to Figs. 1, 2, and 3, A represents the usual roll of web paper, which is supported axially upon the wooden or other plugs, B, forced into the opposite ends of its central opening and turning freely upon the short studs or spindles, *a*, which are preferably screwed into the metallic supporting-frame C. This frame C is composed of a plate-like portion adapted to be fastened up against a side wall or other vertical surface, and two projecting portions, which extend outwardly at about right angles from the plate-like portion, and which are provided at their outer ends with vertical extensions that are slotted out, as seen at D.

Mounted over the roll of paper, and resting thereon, is a cutter-bar, E, which is formed or provided at its forward edge with a serrated knife or cutter, *d*, and at its rearmost edge with a preferably rounded or bar-like portion, the said cutter-bar being free to descend by gravity as the size of the roll of paper decreases, and also to slightly rock or oscillate on its periphery, in a manner and for a purpose to be presently explained. Said cutter-bar is held in
23 engagement with the slotted portions of the metallic frame by studs projecting from each end of said cutter-bar into said slotted portions of the metallic frame. In the case shown these studs for effecting an engagement between the cutter-bar of the slotted portions of the frame are composed of the end portions of a drag-bar, F, which, as shown, has its bent round end portions pivotally connected with the ends of the cutter-bar, and has its main or body portion arranged to lie in the rear of the back edge of the cutter-bar and in close proximity thereto. As will be clearly understood from the drawings, the projecting or free end *f* of the web of paper will be caused to stand up in about the condition seen at Fig. 1 by reason of the action of the drag-bar F, which by gravity rests upon the back side of the paper in such manner as to cause the projecting portion *f* to be drawn and held in the position illustrated at Fig. 1.

When it is desired to use a portion of the paper, the free end *f* is grasped by the person using the contrivance, and, a sufficient quantity having been unreeled, the web is pulled over and down readily

into the position seen at Fig. 2, whereby the drag-bar F is necessarily lifted, the points of the serrated cutter forced into the paper, and the further unreeling of the paper prevented by the pressure on the cutter, forcing the body of the cutter down onto the roll of paper, thus bringing all the moving parts to a dead-lock.

By the usual sudden and partial sidewise jerk on the paper the reeled-off portion of the latter in advance of the cutter is severed from the rest, and the remaining end of the web is again forced into the position seen at Fig. 3 by the descent by gravity of the drag-bar F into the position shown at Figs. 1 and 3. In the form of contrivance shown at Fig. 4, and adapted to be fastened on top of a counter or table, the slotted portions or extensions of the metallic frame are made of separate pieces, and are held in place by the screw-studs, on which are mounted the plugs that support the paper roll, and by unscrewing and retightening these screw-studs the slotted extensions of the metallic frame may be adjusted relatively to the main portion of said frame, so that the latter may be secured against a vertical wall or surface, thus permitting the use of the contrivance in the same manner as that shown at Figs. 1, 2, and 3. This adjustment of the parts is illustrated at Fig. 4 by the dotted lines. In the form of contrivance shown at Fig. 5, the same mode of operation is involved, the only difference in construction being that the floating cutter-bar having attached thereto the drag-bar is arranged in conjunction with a wire bail-like paper-support instead of being mounted as in the other cases to work in conjunction with a cast-iron roll-supporting frame provided with slotted extensions.

Of course, any variations in the details of construction of the contrivance may be made without departing from the spirit of my invention, and the main feature of the latter may be carried out under other modifications than those herein shown and described.

The drag-bar might be differently arranged on the floating cutter-bar, and the latter provided with independent studs or devices for engagement with the slotted portions of the metallic frame. Again, the drag-bar, instead of being pivoted to the cutter-bar, might be made to engage only with the slotted portions of the metallic frame, in such manner as to act by gravity on the paper and in the rear of the back edge of the cutter-bar, in substantially the same manner that it acts under the arrangements shown in the drawings. By use, however, of the slotted portions of the frame, and the combination therewith of the floating cutter-bar, and the drag-bar pivoted to the latter, a specific construction is produced, which I have found to work well, and to be simple and economic of manufacture.

If deemed expedient, the contrivances adapted for use in both of the ways shown at Fig. 4 may be made with the metallic frames both ways—that is, some made in the form shown at Figs. 1, 2, and 3, and others in the form shown in full lines at Fig. 4.

Having now so fully explained my invention that those skilled in the art can make and use the same in one form or another, as may be deemed expedient, what I claim as new, and desire to secure by letters patent, is—

1. In combination with a cutter-bar adapted to rest on the roll of paper, and means for supporting the latter, a drag-bar arranged to rest upon the paper in rear of the back edge of the cutter bar or frame, and operating to throw and hold the free end of the web upwardly and away from the cutter, all substantially in the manner and for the purposes hereinbefore set forth.

2. The combination of a roll-supporting frame provided with slotted portions, a floating cutter-bar working in engagement with said slotted portions of the frame, and a drag bar arranged in the rear of the back portion of said cutter-bar, all substantially as and for the purposes set forth.

3. In combination with the floating cutter-bar and the roll-supporting cutter-frame provided with slotted portion, a drag-bar pivoted to said cutter-bar, and also operating to effect the engagement of said cutter-bar with said slotted portions of the frame, all substantially as hereinbefore set forth.

In witness whereof I have hereunto set my hand this 19th day of September, 1884.

CHARLES C. JOHNSON.

In presence of—
JAS. H. WILLIAMS.
JOS. S. WILLSON.

24 DEFENDANTS' EXHIBIT No. 13. A. M. T., Spec. Ex'r.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy, from the files of this office, of the file-wrapper and contents in the matter of the letters patent granted Oliver Hewlett Hicks, August 25, 1885, number 325,174, for improvement in toilet-paper fixture.

In testimony whereof, I, Benton J. Hall, Commissioner of Patents, have caused the seal of the Patent Office to be affixed [SEAL.] this 25th day of July, in the year of our Lord one thousand eight hundred and eighty-seven, and of the Independence of the United States the one hundred and twelfth.

BENTON J. HALL,
Commissioner.

Petition.

To the Commissioner of Patents of the United States of America:

Your petitioner, Oliver Hewlett Hicks of Chicago, in the county of Cook, State of Illinois, prays that letters patent may be granted to him for the invention set forth in the annexed specifica-
25 tion; and he hereby appoints the firm of Church & Church (composed of Melville Church and J. B. Church), of Washington, D. C., his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and

amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

OLIVER HEWLETT HICKS.

Oath.

COUNTY OF WASHINGTON, } ss:
District of Columbia, }

Oliver Hewlett Hicks, the above-named petitioner, a citizen of the United States, and resident of Chicago, in the county of Cook, State of Illinois, being duly sworn, deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvements in toilet-paper fixture described and claimed in the annexed specification; that the same has not been patented to himself or to others, with his knowledge or consent, in any country; that the same has not, to his knowledge, been in public use, or on sale, in the United States for more than two years prior to this application, and that he does not know, and does not believe, that the same was ever known or used prior to his invention thereof.

OLIVER HEWLETT HICKS.

Sworn to and subscribed to before me, this 11th day of July, 1885.

MICH'L P. CALLAN,
[SEAL.] *Notary Public.*

26 To whom it may concern:

Be it known that I, Oliver Hewlett Hicks, of Chicago, in the county of Cook, and State of Illinois, have invented certain new and useful improvements in toilet-paper fixtures, and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification and to the figures and letters of reference marked thereon.

Heretofore toilet paper has been put up in rolls of continuous lengths, and hung in suitable bearings, so as to be removed as needed; and in some instances, the paper has been perforated transversely at regular intervals to enable the user to, with greater convenience, tear off portions of the requisite length, or, in lieu of this, a cutter has been arranged in proximity to the roll to enable the quantity pulled off the roll to be conveniently severed.

A well-founded objection has been urged against each of these arrangements: to wit, that the employment of them entails a great waste of paper, since in a large majority of instances, from the freedom with which the paper is unwound from the roll a much larger quantity is withdrawn than is needed.

The object of my invention is to so arrange the paper as to prevent more than a given quantity of it from being withdrawn from the roll at a single operation, and so that in the act of withdrawing such given quantity it shall be automatically severed from the roll,

leaving pendant from the roll a free end, which shall serve as a means for withdrawing a like quantity by the next user.

In order that others may acquire a full understanding of
27 my invention I will now proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 represents a top view of the fixture and roll.

Figure 2 a longitudinal vertical section of the same.

Figure 3 an end view; and

Figure 4 a view of the core plate detached.

Figures 5 and 6 are views of modified forms of the invention.

Similar letters of reference in the several figures indicate the same parts.

The letter A represents a plate or backing adapted to be secured to a wall or other object, and having extending from it two spring arms, E E, which have, near their outer ends, bearings H H, for the accommodation of the journals or pivots of a core plate, F, arranged within the roll of paper. Between the arms, E E, and near the inner portions, extends a plate, M, the outer edge of which may be made either plain or serrated, though I, by preference, make it serrated, as shown in figure 1. The roll of toilet paper, B, has a large central opening for the accommodation of core plate, F, and when slipped upon said core plate, assumes an elongated or oval shape as shown.

In applying the roll of paper to the fixture the core plate is first slipped into it, and is then connected to the arms, E E, by springing the latter outward sufficiently to permit the pivots or journals of said core plate to be entered in the bearings, H H, of said arms as will be readily understood. By preference, the pivots or journals are located out of line with the center of gravity of the plate in order that one side of said core plate shall normally hang downward and tend to hold the roll of paper in substantially the position shown in figures 2 and 3. This result may be effected either
28 by arranging the pivots eccentrically to the core plate, or by attaching them centrally thereto, and having one side of the core plate heavier than the other.

With the roll hung in the manner described the operation of unwinding and severing paper from it is as follows:

The depending end, C, is grasped by the user and pulled, and the roll is thereby rotated until arrested by its upper portion coming in contact with the plate, M, as shown by the dotted lines in figure 2. As soon as this arrest of the motion of the roll takes place the depending portion of the paper becomes drawn tightly over the plate, M, and can be severed at that point either by a continued pull on the paper or by a lateral tearing motion. The roll is released by the severance of the end, and swings back toward first position, bringing up against the under side of the plate, M, and by the jar imparted to it by contact with said plate causes the new end of paper to drop down into position to be grasped by the next user.

It will be observed that the plate, M, performs the functions of a stop for arresting the forward rotation of the roll, and holding the roll while the section of paper is being removed, as well as the func-

tion of severing said section of paper, and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll.

From the preceding description it is clear that only a limited amount of paper can be removed from the roll at any one operation, and that the circumference of the roll fixes the limit of length of the portion detached.

It may be stated that to obtain the most practical and economical results the roll of paper, when in cylindrical form, and before
29 the core plate is applied to it, should have an internal diameter of not less than twice the thickness of its superposed layer. I prefer rolls of an interior diameter of, say, two inches and three-quarters, and an external diameter of about five inches. When these proportions are not substantially followed the last sheets severed from the roll will either be too short, or the first sheets will be too long, resulting, on the one hand, in an insufficient article, and, on the other hand, in an unnecessary waste of material.

Instead of weighting the core plate to cause it to return the roll after the latter has been oscillated in one direction by the pull on the paper, a spring, *s*, may be arranged on the core plate in such manner as to strike one of the arms, E, and by its rebound return the roll to first position, as shown in figure 5.

A round roll may be substituted for the oval one, in which case an arm, A^1, to throw the roll out of balance, and a distance-determining stop, A^2, must be substituted for the oval roll and weighted core plate, as shown in figure 6.

I do not specifically claim herein the form or construction of the oval roll, since it is made the subject-matter of a separate original application filed by me on the 10th day of July, 1885.

Neither do I claim herein, broadly, the combination with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion, when so actuated either with or without another stop for arresting the motion of said roll at the limit of its oscillation in the opposite direction, nor do I claim herein such a combination, wherein the roll is hung upon the bearings out of line with its center of gravity, so as to automatically return it to first position after being turned by the pull of the paper; but I have made all such matters the subject of a separate application, filed February 7th, 1885, of which this is a division.

30 I claim as my invention:

1st. The combination, with a weighted oscillating roll of toilet paper, actuated in one direction by a pull upon its free end, of a knife or cutter co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, and a stop for limiting the motion of said roll, substantially as described.

July 31, '85.

2nd. The combination, with an oscillating roll of toilet paper, having its bearings out of line with its center of gravity, and actuated in one direction by a pull upon its free end, of a stop, constituting a knife or cutter for co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, the eccentric hanging of the roll returning it automatically to its normal position, substantially as described.

Erased July 31, '85. 3rd. The combination, with an oscillating roll of paper of elongated or oval form, actuated in one direction by a pull upon its free end, of a stop for arresting said roll at the limit of its motion when so actuated, substantially as described.

[4th]* 3rd. The combination, with an elongated or oval oscillating roll of toilet paper, actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated, substantially as described.

[5th]* 4th. The combination with the supporting arms of a stop-plate or cutter extending between said arms, and an oscillating core plate, having its bearings in said arms, and adapted to hold a roll of paper, substantially as described.

Erased Aug. 6, '88. [10th]* 5. The combination with the supporting arms of an oscillating core plate weighted on one side of its pivots so as to cause the roll supported by it to automatically resume its nor- and a stop for limiting the motion of said plate,
July 31, '85. mal position after being oscillated, A substantially as described.

31 [11th]* [6]* 5th. The combination of the back plate, the supporting arms, the plate forming the stop and cutter, and the oscillating core plate, the whole arranged and operating substantially as described.

OLIVER HEWLETT HICKS.

Witnesses:
A. S. STEUART.
FRED. F. CHURCH.

*[Figures and letters in brackets erased in copy.]
[Paragraphs enclosed between rules erased in copy.]

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *July 30th*, 1885.

(Mailed July 31, 1885.)

No. 171,801. Toilet-paper fixtures. Filed July 16, 1885.

Oliver H. Hicks, c. o. Church & Church, present:

This case has been examined.

Claim 1 is rejected as defining no construction over the ordinary roll and fixtures.

Claim 3 is rejected as a duplication of claim 1 in applicant's original case.

Claim 6 involves no invention, and is accordingly refused.

GALLATIN, *Examiner.*

V. R., *3d Ass't.*

32 O. H. HICKS.

Toilet-paper fixture. Filed July 16th, 1885. No. 171,801.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case as follows:

Claim 1, line 5, after "direction" insert "and a stop for limiting the motion of said roll."

Erase claim 3.

Claim 6, after "oscillated," line 4, insert "and a stop for limi-ng the motion of said plate."

July 31st, 1885.

Respectfully, CHURCH & CHURCH,
Att'ys for Applicant.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *August 5th*, 1885.

No. 171,801. Toilet-paper fixtures. Filed July 16th, 1885.

Oliver Hewlett Hicks, c. o. Church & Church, present:

In applicant's amendment, filed July 31st, 1885, the 5th claim is substantially the same as claims 1 and 3 in his original application.

GALLATIN, *Examiner.*

V. R.

33 OLIVER HEWLETT HICKS. Filed July 16th, 1885. No. 171,801.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case by erasing the fifth claim.

August 6th, 1885.

Respectfully, CHURCH & CHURCH,
Att'ys for Applicant.

Memorandum of fee paid at U. S. Patent Office.

Serial No. 171,801. Inventor, Oliver H. Hicks. Patent to be issued to —— ——. Name of invention, as allowed, toilet-paper fixtures. Date of payment, August 6th, 1885. Fee—final—$20. Solicitor-, Church & Church. Date of filing, July 16th, 1885. Date of circular of allowance, —— —, ——. Send patent to Church & Church (box in room 116).

34

U. S. Patent Office,
Jan., 1886.
Ex'r of interferences.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *December 21st*, 1885.

Oliver H. Hicks, c. o. Church & Church, Washington, D. C.:

Please find below a copy of a communication from the examiner concerning your patent for toilet-paper fixture, dated August 25th, 1885, and numbered 325,174.

Very respectfully, W. V. MONTGOMERY,
Commissioner of Patents.

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the 28th day of January, 1886, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is the combination with an elongated or oval oscillating roll of toilet paper, actuated in one direction by a pull upon its free end, of a stop, constituting a knife or cutter, co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated.

35 The interfering applicant is Henry B. Richardson of Amherst, Mass., whose attorney is Wallace A. Bartlett of Washington, D. C.

The issue is embraced in Richardson's 1st and 2d claims, and in all of your claims.

D. B. GALLATIN, *Act'g Ex.*

Notice of allowance dated August 6, 1885.

Memorandum of Incomplete Application of O. H. Hicks.

Serial No., 171,801. Ex'r Book No. $\frac{661}{48}$. Gallatin.

1885. Patent No. 325,174.

Oliver Hewlett Hicks of Chicago, county of Cook, State of Illinois.

Invention: Toilet-paper fixtures.

Parts of application filed.
- Petition, July 14, 1885.
- Affidavits, " " "
- Specification, July 16, 1885.
- Drawing, 2 sheets, July 14, 1885.
- Model, none.
- Specimen.
- First fee, cash, $15, July 14, 1885.
- " " cert.

App. filed complete July 16, '85.
Examined Aug. 6th, 1885. Gallatin.
Countersigned: J. W. Babson, for Commissioner.
Aug. 6, '85.
Notice of allowance, Aug. 6th, 1885.
Final fee, cash, $20, Aug. 6, 1885.
" " cert., —— —, 188–.
Patented Aug. 25, 1885.
Att'y- or P. O. address, Church & Church, city.

(No Model.) 2 Sheets—Sheet 2.

O. H. HICKS.

TOILET PAPER FIXTURE.

No. 325,174. Patented Aug. 25, 1885.

No. 254. Morgan Envelope Co. v. A. P. W. P. Co. Mal. } p. 37

Fig. 6.

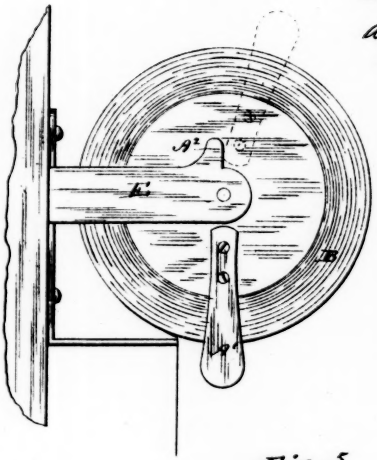
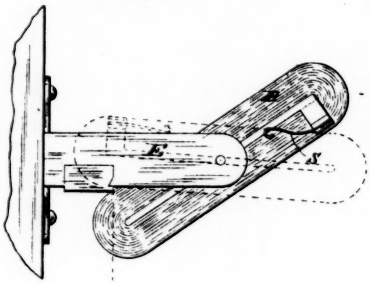


Fig. 5.



Witnesses.
Chas. R. Burr
A. J. Glover

Inventor.
Oliver Burdett Hicks
by Church & Church
his Attorneys.

(No Model.) 2 Sheets—Sheet 1.

O. H. HICKS.

TOILET PAPER FIXTURE.

No. 325,174. Patented Aug. 25, 1885.

Fig. 1.

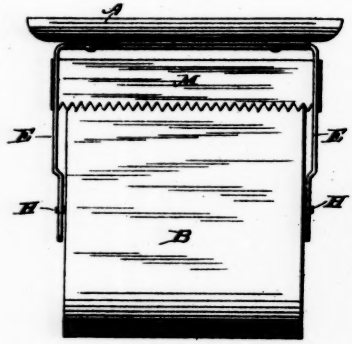
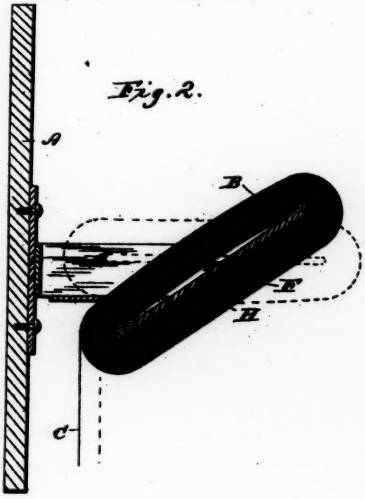


Fig. 2.



No. 254
Morgan Envelope Co
A. P. W. P. C.
Stal
p. 36.

Fig. 3.

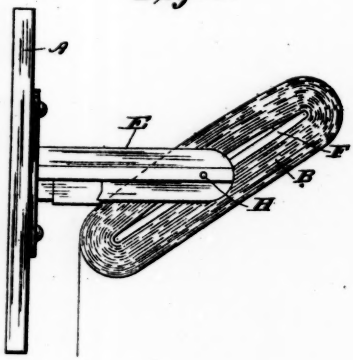
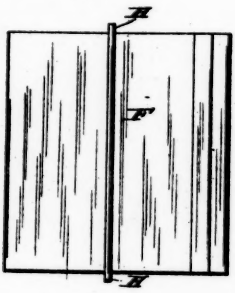


Fig. 4.



Witnesses.
Chas. R. Burr.
A. J. Stewart

Inventor.
Oliver Howlett Hicks
By Church & Church
his Attorneys.

38 UNITED STATES PATENT OFFICE.

OLIVER HEWLETT HICKS, of Chicago, Illinois.

Toilet-paper Fixture.

Specification forming part of Letters Patent No. 325,174, dated August 25, 1885. Application filed July 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in toilet-paper fixtures; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

Heretofore toilet-paper has been put up in rolls of continuous length and hung in suitable bearings, so as to be removed as needed, and in some instances the paper has been perforated transversely at regular intervals to enable the user to, with greater convenience, tear off portions of the requisite length, or in lieu of this a cutter has been arranged in proximity to the roll to enable the quantity pulled off the roll to be conveniently severed. A well-founded objection has been urged against each of these arrangements—to wit, that the employment of them entails a great waste of paper, since, in a large majority of instances, from the freedom with which the paper is unwound from the roll, a much larger quantity is withdrawn than is needed.

The object of my invention is to so arrange the paper as to prevent more than a given quantity of it from being withdrawn from the roll at a single operation, and so that in the act of withdrawing such given quantity it shall be automatically severed from the roll, leaving pendent from the roll a free end, which shall serve as a means for withdrawing a like quantity by the next user.

In order that others may acquire a full understanding of my invention, I will now proceed to describe it with reference to the accompanying drawings, in which—

(Here follow diagrams marked pp. 36 & 37.)

Figure 1 represents a top view of the fixture and roll; Fig. 2, a longitudinal vertical section of the same; Fig. 3, an end view, and Fig. 4 a view of the core-plate detached. Figs. 5 and 6 are views of modified forms of the invention.

Similar letters of reference in the several figures indicate the same parts.

The letter A represents a plate or backing adapted to be secured to a wall or other object, and having extending from it two spring-arms, E E, which have near their outer ends bearings H H for the

accommodation of the journals or pivots of a core-plate, F, arranged within the roll of paper. Between the arms E E, and near the inner portions, extends a plate, M, the outer edge of which may be made either plain or serrated, though I by preference make it serrated, as shown in Fig. 1. The roll of toilet-paper B has a large central opening for the accommodation of the core-plate F, and when slipped upon said core-plate assumes an elongated or oval shape, as shown.

In applying the roll of paper to the fixture the core-plate is first slipped into it, and is then connected to the arms E E by springing the latter outward sufficiently to permit the pivots or journals of said core-plate to be entered in the bearings H H of said arms, as will be readily understood. By preference the pivots or journals are located out of line with the center of gravity of the plate, in order that one side of said core-plate shall normally hang downward and tend to hold the roll of paper in substantially the position shown in Figs. 2 and 3. This result may be effected either by arranging the pivots eccentrically to the core-plate, or by attaching them centrally thereto, and having one side of the core-plate heavier than the other.

With the roll hung in the manner described the operation of unwinding and severing paper from it is as follows: The depending end C is grasped by the user and pulled, and the roll is thereby rotated until arrested by its upper portion coming in contact with the plate M, as shown by the dotted lines in Fig. 2. As soon as this arrest of the motion of the roll takes place the depending portion of the paper becomes drawn tightly over the edge of the plate M, and can be severed at that point, either by a continued pull on the paper or by a lateral tearing motion. The roll is released by the severance of the end, and swings back toward first position, bringing up against the under side of the plate M, and by the jar imparted to it by contact with said plate causes the new end of paper to drop down into position to be grasped by the next user.

It will be observed that the plate M performs the function of a stop for arresting the forward rotation of the roll, and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper, and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll.

39

From the preceding description it is clear that only a limited amount of paper can be removed from the roll at any one operation, and that the circumference of the roll fixes the limit of length of the portion detached.

It may be stated that to obtain the most practical and economical results the roll of paper, when in cylindrical form, and before the core-plate is applied to it, should have an internal diameter of not less than twice the thickness of its superposed layers. I prefer rolls of an interior diameter of, say, two inches and three-quarters and

an external diameter of about five inches. When these proportions are not substantially followed, the last sheets severed from the roll will either be too short, or the first sheets will be too long, resulting, on the one hand, in an insufficient article, and on the other hand in an unnecessary waste of material.

Instead of weighting the core-plate to cause it to return the roll after the latter has been oscillated in one direction by the pull on the paper, a spring, *s*, may be arranged on the core-plate in such manner as to strike one of the arms E, and by its rebound return the roll to first position, as shown in Fig. 5.

A round roll may be substituted for the oval one, in which case an arm, A′, to throw the roll out of balance, and a distance-determinating stop, A^2, must be substituted for the oval roll and weighted core-plate, as shown in Fig. 6.

I do not specifically claim herein the form or construction of the oval roll, since it is made the subject-matter of a separate original application filed by me on the 10th day of July, 1885. Neither do I claim herein, broadly, the combination, with an oscillating roll of toilet-paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, either with or without another stop for arresting the motion of said roll at the limit of its oscillation in the opposite direction; nor do I claim herein such a combination, wherein the roll is hung upon bearings out of line with its center of gravity, so as to automatically return it to first position after being turned by the pull of the paper; but I have made all such matters the subject of a separate application filed February 7, 1885, of which this is a division.

I claim as my invention—

1. The combination, with a weighted oscillating roll of toilet-paper actuated in one direction by a pull upon its free end, of a knife or cutter co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, and a stop for limiting the motion of said roll, substantially as described.

2. The combination, with an oscillating roll of toilet-paper having its bearings out of line with its center of gravity and actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter for co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, the eccentric hanging of the roll returning it automatically to its normal position, substantially as described.

3. The combination, with an elongated or oval oscillating roll of toilet-paper actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated, substantially as described.

4. The combination, with the supporting-arms, of a stop-plate or cutter extending between said arms, and an oscillating core-plate having its bearings in said arms and adapted to hold a roll of paper, substantially as described.

5. The combination of the back plate, the supporting arms, the plate forming the stop and cutter, and the oscillating core-plate, the whole arranged and operating substantially as described.

OLIVER HEWLETT HICKS.

Witnesses:
A. S. STEUART.
FRED. F. CHURCH.

40 1885.

Contents.

Application papers.
1. Rejected July 30th, 1885.
2. Amend't July 31, 1885.
3. Letter, Aug. 5, 1885.
4. Amendment Aug. 6, 1885.
5. Intf. letter, Dec. 21, 1885.
15. 120. Stationery ticket reels.
Title: Improvement in toilet-paper fixtures.

41 DEFENDANTS' EXHIBIT No. 14. A. M. T., Spec. Ex'r.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office, of the file-wrapper and contents, in the matter of the letters patent granted Oliver Hewlett Hicks, September 1, 1885, number 325,410, for improvement in package of toilet paper.

In testimony whereof I, Benton J. Hall, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this [SEAL.] 25th day of July, in the year of our Lord one thousand eight hundred and eighty-seven, and of the Independence of the United States the one hundred and twelfth.

BENTON J. HALL, *Commissioner.*

Petition.

To the Commissioner of Patents of the United States of America:

Your petitioner, Oliver Hewlett Hicks of Chicago, in the county of Cook, State of Illinois, prays that letters patent may be granted to him for the invention set forth in the annexed specification; and he hereby appoints the firm of Church & Church (composed
42 of Melville Church and J. B. Church) of Washington, D. C., his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

OLIVER HEWLETT HICKS.

Oath.

COUNTY OF WASHINGTON, } ss:
District of Columbia, }

Oliver Hewlett Hicks, the above-named petitioner, a citizen of the United States and resident of Chicago, in the county of Cook,

State of Illinois, being duly sworn, deposes and says that he verily believes himself to be the original, first, and sole inventor of the improvement in packages of toilet paper, described and claimed in the annexed specification; that the same has not been patented to himself or to others with his knowledge or consent in any country; that the same has not, to his knowledge, been in public use, or on sale, in the United States for more than two years prior to this application, and that he does not know, and does not believe, that the same was ever known or used prior to his invention thereof.

OLIVER HEWLETT HICKS.

Sworn to and subscribed before me, this 10th day of July, 1885.

MICH. P. CALLAN,

[L. S.] *Notary Public.*

43 To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks of Chicago, in the county of Cook, and State of Illinois, have invented a certain new and improved package of toilet paper, and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification, and to the figures and letters of reference marked thereon.

Heretofore toilet paper has usually been furnished to the public either in the form of sheets cut to the proper size for use, or in cylindrical rolls of continuous lengths. In some cases the paper furnished in the form of rolls has been perforated transversely at regular intervals with the view of enabling the user to separate it into sheets of uniform size, and thus obtain the advantages of the package composed of independent sheets. The chief objection to each of these modes of furnishing toilet paper is the great amount of wastage which occurs. Where the separate-sheet plan is employed the user is apt to detach a great many more sheets than he actually uses, while where the roll plan is practiced the rolls are usually hung so as to freely revolve, and the user, by a pull upon the depending end, oftentimes recklessly reels off yards where feet would answer.

The object I have had in view has been to furnish toilet paper in a form which would prevent, in a large measure, this vast amount of wastage. In carrying out this object I have put up one or more lengths of paper in the form of a continuous band, as contradistinguished from a roll, of oblong or oval shape, the short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order
44 to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper. The band I make of a thickness calculated to produce sheets, severed at the points stated, of practical and economical lengths, from the time the bundle is opened until it is consumed.

In the accompanying drawings I have illustrated my improved form of bundle.

Figure 1 shows the mode of tearing off the sheets, and

Figure 2 is a side view of one of the bundles.

In the manufacture of these bundles I preferably form the band by winding continuous lengths of paper upon a mandrel of suitable size, with or without the interposition of a thick paper core, *a*, shown in figure 2, and when the band has attained a sufficient thickness it is removed from the mandrel and collapsed or flattened into the oblong or oval shape shown in both figures.

I make the internal diameter of the band, when in cylindrical form, of not less than twice the thickness of the band at any one point, and the proportions which I prefer to employ are as follows: Width of paper, from four and one-half to five inches; internal diameter of band, when in cylindrical form, about two and three-quarter inches; external diameter, from four to five inches.

This form of bundle may be mounted in a fixture such as shown, described, and claimed in my application for patent, serial No. 155,464, filed February 7th, 1885, or it may be used detached from a fixture (as shown in figure 1), one hand of the user being slipped into the interior and the other hand being employed to grasp the pendant end of the paper, and by drawing the paper tight-y over one of the short rounded ends of the bundle, causing it to separate at that point and produce a sheet of convenient length.

The oblong flattened form of the bundle enables it to be packed in cases to greater advantage than if it were in cylindrical form, the small interstices between the rounded ends being the only spaces left unoccupied.

In the use of my improved package it is obvious that when one sheet is torn off the end of the portion which is to form the next succeeding one will automatically descend into a convenient position to be grasped. This is a feature of importance, and it is obvious that the employment of any substance which would cause the adherence of the layers, or convolutions, one to the other, or of any form of contrivance that would prevent the free separation of the end from the body of the paper would entirely defeat it.

Erased July 30, '85.

I claim as my invention as a new article of manufacture, a bundle of toilet paper consisting of one or more lengths of paper formed into a flexible continuous band of oblong or oval shape, the short rounded ends of said band serving as guides for determin-g the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording, also, the most advantageous surfaces upon which to tear the paper, substantially as described.

Insert A, July 16, '85.

OLIVER HEWLETT HICKS.

Witnesses:
FRED. F. CHURCH.
A. S. STEUART.

[Paragraph enclosed between rules erased in copy.]

46 OLIVER HEWLETT HICKS. Package of toilet paper. No. 171,216. Filed July 10th, 1885.

Hon. Com'r of Patents.

SIR: Please amend the above-entitled case by inserting the following claim:

A. [2].* A bundle of paper, consisting of one or more lengths, formed into a continuous band, whose internal diameter is greater than the thickness of paper, substantially as described.

July 16, 1885.

Respectfully, CHURCH & CHURCH,
Attorneys for Applicants.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *July 28th*, 1885.

(Mailed July 29, 1885.)

Oliver H. Hicks, care Church & Church, present.

No. 171,216. Packages of toilet paper. Filed July 10, 1885.

47 Applicant's first claim is rejected as indefinite, since it fails to point out any construction over any ordinary paper roll. It is rejected on J. F. Peacock, dated March 6, 1883, 273,594 (ticket reels).

GALLATIN, *Examiner.*

V. R., *3d Ass't.*

OLIVER HEWLETT HICKS. Package of toilet paper. Filed July 10th, 1885. No. 171,216.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case by erasing the first claim.

July 30th, 1885.

Respectfully, CHURCH & CHURCH,
Att'ys for Applicant.

Notice of allowance, dated Aug. 7th, 1885.

Memorandum of Fee Paid at U. S. Patent Office.

Serial No. 171,216, 1885. Inventor, Oliver Hewlett Hicks. Patent to be issued to inventor. Name of invention, as allowed, package of toilet paper. Date of payment, August 10th, 1885. Fee, final, $20. Solicitors, Church & Church. Date of filing, July 10th, 1885. Date of circular of allowance, August 7th, 1885. Send patent to Church & Church (box in room 116).

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*[Figure in brackets erased in copy.]

49 UNITED STATES PATENT OFFICE.

OLIVER HEWLETT HICKS, of Chicago, Illinois.

Package of Toilet-paper.

Specification forming part of Letters Patent No. 325,410, dated September 1, 1885. Application filed July 10, 1885. (No model.)

To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and improved package of toilet-paper; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

Heretofore toilet-paper has usually been furnished to the public either in the form of sheets cut to the proper size for use or in cylindrical rolls of continuous lengths. In some cases the paper furnished in the form of rolls has been perforated transversely at regular intervals, with the view of enabling the user to separate it into sheets of uniform size, and thus obtain the advantages of the package composed of independent sheets. The chief objection to each of these modes of furnishing toilet-paper is the great amount of wastage which occurs. Where the separate-sheet plan is employed the user is apt to detach a great many more sheets than he actually uses, while where the roll plan is practiced the rolls are usually hung so as to freely revolve, and the user, by a pull upon the depending end, oftentimes recklessly reels off yards where feet would answer.

The object I have had in view has been to furnish toilet-paper in a form which would prevent in a large measure this vast amount of wastage. In carrying out this object I have put up one or more lengths of paper in the form of a continuous band (as contradistinguished from a roll) of oblong or oval shape, the short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper. The band I make of a thickness calculated to produce sheets severed at the points stated of practical and economical lengths from the time the bundle is opened until it is consumed.

(Here follows diagram marked p. 48.)

In the accompanying drawings, I have illustrated my improved form of bundle. Figure 1 shows the mode of tearing off the sheets, and Fig. 2 is a side view of one of the bundles.

In the manufacture of these bundles I preferably form the band by winding continuous lengths of paper upon a mandrel of suitable

(No Model.)

O. H. HICKS.

PACKAGE OF TOILET PAPER.

No. 325,410. Patented Sept. 1, 1885.

Fig. 1.

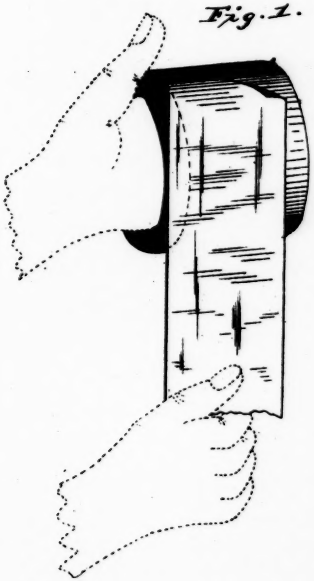

Fig. 2.

No. 254.
Morgan Envelope Co. } p. 48
a. P. W. P. Co. val.

Witnesses.
Chas. R. Burr
Fred F. Church

Inventor.
Oliver Hewlett Hicks,
by Church & Church
His Attorneys.

size, with or without the interposition of a thick paper core, *a*, (shown in Fig. 2,) and when the band has attained a sufficient thickness it is removed from the mandrel and collapsed or flattened into the oblong or oval shape shown in both figures.

I make the internal diameter of the band when in cylindrical form of not less than twice the thickness of the band at any one point, and the proportions which I prefer to employ are as follows: Width of paper, from four and one-half to five inches; internal diameter of band, when in cylindrical form, about two and three-quarters inches; external diameter, from four to five inches.

This form of bundle may be mounted in a fixture such as shown and described and claimed in my application for patent Serial No. 155,464, filed February 7, 1885; or it may be used detached from a fixture, as shown in Fig. 1, one hand of the user being slipped into the interior, and the other hand being employed to grasp the pendent end of the paper, and by drawing the paper tightly over one of the short rounded ends of the bundle causing it to separate at that point and produce a sheet of convenient length.

The oblong flattened form of the bundle enables it to be packed in cases to greater advantage than if it were in cylindrical form, the small interstices between the rounded ends being the only spaces left unoccupied.

In the use of my improved package it is obvious that when one sheet is torn off the end of the portion which is to form the next succeeding one will automatically descend into convenient position to be grasped. This is a feature of importance, and it is obvious that the employment of any substance which would cause the adherence of the layers or convolutions one to the other, or of any form of contrivance that would prevent the free separation of the end from the body of the paper, would entirely defeat it.

I claim as my invention—

A bundle of paper consisting of one or more lengths formed into a continuous band whose internal diameter is greater than the thickness of paper, substantially as described.

OLIVER HEWLETT HICKS.

Witnesses:
FRED. F. CHURCH.
A. S. STEUART.

50 Serial No. 171,216.
Ex'r Book No. $\frac{656}{48}$.
1885. Patent No. 325,410.
Oliver Hewlett Hicks of Chicago, county of Cook, State of Illinois.
Invention: Packages of toilet paper.

Parts of application filed.
- Petition, July 10, 1885.
- Affidavit, " " "
- Specification, July 10, 1885.
- Drawing, " " "
- Model, none.
- Specimen.
- First fee, cash, $15, July 10, 1885.
- " " cert.

App. filed complete, July 10, '85.
Examined August 5th, 1885. Gallatin.
Countersigned, Aug. 7, '85. J. W. Babson, for Commissioner.
Notice of allowance, Aug. 7, 1885.
Final fee, cash, $20, Aug. 10, 1885.
" " cert.
Patented Sept. 1, 1885.
Att'y or P. O. address, Church & Church, city.

1885.

Contents.

Application papers.
1. Amendment A, July 16, 1885.
2. Rejected July 28, 1885.
3. Amendment B, July 30, 1885.
17. 120. Stationery ticket reels.
Title: Improvement in packages of toilet paper.

51 DEFENDANTS' EXHIBIT No. 15. A. M. T., Spec. Ex.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.

To all persons to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the files of this office of the file-wrapper and contents, in the matter of the letters patent granted Oliver Hewlett Hicks, February 15, 1887, number 357,993, for improvement in apparatus for holding toilet paper.

In testimony whereof I, Benton J. Hall, Commissioner of Patents, have caused the seal of the Patent Office to be affixed this [SEAL.] 25th day of July, in the year of our Lord one thousand eight hundred and eighty-seven, and of the Independence of the United States the one hundred and twelfth.

BURTON J. HALL,
Commissioner.

To the Commissioner of Patents:

Your petitioner, Oliver Hewlett Hicks of Chicago, county of Cook, and State of Illinois, a citizen of the United States, prays that letters patent be granted to him for the "new apparatus for holding toilet paper and for measuring it off to the user," set forth in the
52 annexed specification, and he hereby appoints Jas. M. Hicks of 19 Park place, New York, his attorney-in-fact, with full powers to alter and amend this specification and to transact all business in the Patent Office therefor.

OLIVER HEWLETT HICKS.

To all whom it may concern :

Cancelled by sub. spec. Be it known that I, Oliver Hewlett Hicks, of Chicago, county of Cook, and State of Illinois, have invented new apparatus for holding toilet paper and for measuring it off to the user, and I do hereby declare that the following is a full, clear and exact description and specification of the same, reference being had to the drawings forming part of the same:

Before my invention rolls of toilet paper had been hung on central bearings, so as to be unwound as needed; they were also perforated transversely at regular intervals, to enable the user to tear off a portion at the perforations. In some cases a cutter had been provided in front of the roll to assist the user in removing such length as he happened to pull out. No apparatus, however, had ever been used for the purpose of limiting the amount he could take off at one time, and thus prevent waste.

My invention consists in certain mechanism or apparatus to measure off a limited quantity of paper from the roll.

In order that persons skilled in the art may understand, construct and use my invention, I will proceed to describe the way in which I have constructed it.

Referring to the drawings in which Fig. 1 is a front view of my apparatus; Fig. 2 is a side view; Fig. 3 is a top view; Figs. 4 and 5 are respectively side and front views of the stiff
53 piece which is placed in the center of the roll and supports it in bearings on the frame; A is the frame or wall piece to be secured to the wall in an upright position; D is a plate attached to the frame; E E are arms which are fastened to and extend forward from the plate D. These arms have bearings H H near their outer ends. B is an oval or flattened roll of toilet paper; it is flattened from a circular roll having a large centre opening into the shape shown. C is a stiff roll or lining of strawboard or equivalent material, which lines the inner circumference of the roll. F is a stiff piece of metal which is placed inside the strawboard lining; it extends from side to side of the roll and has pivots on each side, which rest in bearings H H on the arms E E; they are arranged eccentrically to throw the greater weight of the roll and parts above the bearings; they may be placed centrally, and the upper half of the center-piece may be made heavier than the lower half, to accomplish the same purpose. L is the upper and K is the lower end of the roll. M is a flat piece of metal attached to and extending from the under side of one arm E to the other, behind the roll. Its forward side or edge is serrated toward the roll B; against this serrated edge the lower end of roll B rests in its normal position; the free end C^1 of the paper of the roll hangs down, as shown in Fig. 2. The operator pulls on this end C^1 and revolves the roll one half turn, until the

[Paragraphs enclosed between rules erased in copy.]

upper end comes in contact with the cutting teeth of the strip M; this checks the further movement of the roll and the piece C^1 is cut away from it. The roll then being released, the weight of the upper half being greater than the lower half of the roll causes it to return to its former position. This throws the free end C^1 of the paper down into its former position, as shown at Fig. 2, ready for the next operation. Thus it will be seen that only a limited amount of paper can be removed from the roll at one time.

54 The strip M may be plain or filled with sharp cutting teeth, or a friction plate may be substituted. A round roll may be substituted for the oval one, in which case an arm to throw the roll out of balance and a distance-determining stop must be used as substitutes for the oval roll and heavier upper parts.

Having now fully described my invention and the manner in which I have embodied it, what I claim as new and desire to secure by letters patent is:

1st. The combination substantially as hereinbefore set forth, in a paper-holding device of a flattened or oval roll of paper provided with a center stiffening piece, with supporting arms or bearings and cutter, all arranged and operating substantially as described to measure off a limited length of paper.

2d. The roll of toilet paper provided with a stiffening center piece substantially as described.

3d. A roll of toilet paper whose internal diameter is larger than the thickness of paper wound upon it or surrounding it.

4th. A roll of toilet paper mounted upon a central support, so arranged and constructed as to limit the amount or length of paper which can be removed at any one time, all constructed to operate in substantially the manner set forth.

5th. An irregular roll of toilet paper, with or without a center piece, constructed or wound in such a manner that it may be flattened for use, substantially as described and in the manner and for the purposes specified.

OLIVER HEWLETT HICKS.

Witness:
THEO. L. BERGEN.
C. S. WHEELER.

55 *Oath.*

STATE OF ILLINOIS, }
County of Cook and City of Chicago, } ss:

Oliver Hewlett Hicks, the above-named petitioner, a citizen of the United States and a resident of Chicago, county of Cook and State of Illinois, being duly sworn, deposes and says that he verily believes himself to be the original and first inventor and sole in-

[Paragraphs enclosed between rules erased in copy.]

ventor of the "new apparatus for holding toilet paper and for measuring it off to the user," described and claimed in the foregoing specification; that the same has not been patented to me or to others with my knowledge or consent in any foreign country; that the same has not to my knowledge been in public use or on sale in the United States for more than two years prior to this application; he does not know and does not believe that the same was ever known or used prior to his invention thereof.

OLIVER HEWLETT HICKS.

Sworn to and subscribed before me this 29th day of January, 1885.

ELERY P. BALKAM,
[L. S.] *Notary Public.*

NEW YORK, *Feb.* 7, 1885.

Hon. Commissioner of Patents.

SIR: Enclosed please find check for $15, being application fee for O. H. Hicks' toilet-paper holder sent forward Feb. 6, 18—.

56 NEW YORK, *March* 16, 1885.

Hon. Commissioner of Patents:

Please recognize Messrs. Church & Church, of Washington, D. C., as associate attorneys in the case of Oliver Hewlett Hicks, applicant for patent for "apparatus for holding toilet paper," filed Feb. 7th, 1885, No. 155,464.

JAMES W. HICKS,
Attorney for Oliver Hewlett Hicks.

OLIVER H. HICKS. Apparatus for holding toilet paper. Filed Feb. 7th, 1885. No. 155,464.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case by erasing the entire specification and claims and inserting the following:

To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in apparatus for holding toilet paper.

Cancelled by sub. spec.

My invention relates to an apparatus for the above purpose in which the paper, when drawn off for use, shall be automatically separated into portions of proper length for the purpose.

57 My invention consists, first, in the construction of my apparatus, and, secondly, in the construction of the roll of paper to be employed with the same.

[Paragraphs enclosed between rules erased in copy.]

Before my invention, rolls of toilet paper had been hung on central bearings to be unwound as needed. They were also perforated transversely at regular intervals to enable the user to tear off a portion at the perforations. In some cases a cutter has been provided in front of the roll to assist the user in removing such length as he happened to pull off.

No apparatus, however, so far as I am aware, had ever before my invention been used for the purpose of measuring off the portion removed at one time and confining the length of the same within definite limits, thus preventing waste.

In order that persons skilled in the art may understand, construct and use my invention, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure 1 is a top view of my apparatus; figure 2 a sectional view; figure 3 a side view, and figures 4 a top plan of a stiff piece which is placed in the center of the roll and supports it in bearings in the frame. A is the frame or wall piece to be secured to the wall in an upright position and comprising the securing plate and arms. E E are arms which are fastened to and extend forward from the plate D and which have bearings H H near their outer ends. B is a roll of toilet paper having a large central opening and flattened into the elongated or oval shape shown. C is a stiff roll or lining of strawboard or equivalent material which lines the inner surface of the roll B. F is a stiff piece of metal or equivalent material which is placed inside the strawboard lining. It extends from side to side of the roll and has pivots on each side which rest in the bearings H H, in the arms E E. These bearings are located
58 out of line with the center of gravity of the piece or plate F, in order that one end of the pivoted plate or piece shall always tend downward to a point below the pivots. This may be effected either by attaching the pivots eccentrically to the center-piece or by attaching them centrally and having one-half of the center-piece heavier than the other. L is the upper and K the lower end of the roll; M is a flat piece of metal attached to and extending from the under side of one arm E to the other, behind the roll; its forward edge or side is serrated toward the roll B. The free end C^1 of the roll of paper hangs downward, as is shown in Fig. 2. The operator pulls upon this end C^1 and revolves the roll a part turn until the upper end comes into contact with the cutting teeth of the strip M, as shown in dotted lines in Fig. 2, which check the further movement of the roll and cause the piece C^1 to be cut away from it. The roll, by reason of the weighted internal stiffening piece, resumes its normal position. This throws the free end C^1 of the paper down into its former position, as shown in Fig. 2, ready for the next operation. Thus only a limited amount of paper can be removed from the roll at

[Paragraphs enclosed between rules erased in copy.]

any one time. It will be seen that an essential element of my invention consists of the peculiar construction of the roll which I employ. Owing to the fact that the circumference of the roll prescribes the limit of length as to the portion of paper detached at any one time, it is obvious that the smallest circumference which the roll can attain in use must be sufficiently great to afford a sheet of paper of the requisite length. The smallest circumference which the roll can attain is approximately that of the interior of the roll; therefore it is plain that the inner diameter of the roll should in no case be less than about two inches, and I much prefer to have the inner diameter about two inches and three-quarters, since this permits the smallest sheet measured off to be long enough for doubling. The internal diameter may, however, be increased considerably beyond this measure without giving sheets of a length so great as to be impracticable. On the other hand it is not well to have the external circumference of the roll too great in the first instance, since the effect of this is to yield sheets unnecessarily long and thus produce waste; and the effect is also to cause great disparity of length between the first and last sheets drawn off. I prefer, therefore, with an interior diameter of two inches and three-quarters to give the roll a complete diameter of about five inches, thus causing the paper surrounding the inner surface to be only about one inch in thickness, in the first instance, since in this way the disparity of length between the first and last sheets removed is not excessive, the gradual variation being from about fifteen inches to nine inches. It may be stated generally that the thickness of the paper on the roll should never exceed the internal diameter, partly on account of the disparity in lengths of sheets that would result and partly because if too thick the oval does not acquire the requisite degree of elongation to give good results.

59

So for as I am aware, no roll of toilet paper has ever heretofore been put up for the market with an internal diameter sufficiently great to cause the internal circumference to measure a sheet of the requisite length for use; nor has toilet paper been put up for the market of such proportions that the internal diameter of the roll exceeds the thickness of paper on the roll when completed and before the removal of any portion.

The strip M, which forms the tearing or cutting edge, may be plain or provided with sharp cutting teeth, or a friction plate may be substituted. A round roll may be substituted for the oval one, in which case an arm to throw the roll out of balance and a distance-determining stop must be used as substitutes for the oval roll and weighted center-piece.

Insert B, June 2, '85.

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[Paragraphs enclosed between rules erased in copy.]

What I claim as new and desire to secure by letters patent is:

1. The combination in a holding device for toilet paper, of a support provided with arms or bearings projecting from it, a stiffening piece pivotally mounted in the bearings for holding oval rolls of paper by being inserted into the interior of the same and a tearing edge with which the paper on the pivoted stiffening piece will come into contact when the free end of the paper is pulled, and thus be torn off in sheets of limited length, substantially as described.

Erase & insert D, June 17, '85.

2. As a new article of manufacture, a roll of toilet paper having an internal diameter of not less than about two inches in length, whereby the internal circumference shall measure sheets of not less than about six inches in length, substantially as described.

Erase & insert E, June 17, 1885.

3. As a new article of manufacture, a roll of toilet paper whose internal diameter, when the roll is completed and before any portion of it has been removed, is greater than the thickness of paper wound upon or surrounding it, substantially as described.

4. The combination substantially as hereinbefore set forth, in a paper-holding device, of a flattened or oval roll of paper, provided with a center stiffening piece with supporting arms or bearings and cutter, all arranged and operating substantially as described, to measure off a limited length of paper.

5. The roll of toilet paper provided with a stiffening centerpiece, substantially as described.

6. A roll of toilet paper mounted upon a central support, so arranged and constructed as to limit the amount or length of paper which can be removed at any one time, all constructed to operate in substantially the manner set forth.

7. In a holding device for toilet paper, the combination with the wall piece A, provided with the bearing arms E E, and tearing edge or cutter M, of the plate D, pivotally and removably mounted in the bearing arms, substantially as described.

July 17, '85. 61
Insert A, May 13, '85.

Respectfully,

CHURCH & CHURCH,
Att'ys for Appl't.

March 18, 1885.

[Paragraphs enclosed between rules erased in copy.]

Application of OLIVER HEWLETT HICKS. No. 155,464. Filed Feb. 7, '85.

Apparatus for holding toilet paper.

To the Hon. Commissioner of Patents:

In the matter of the foregoing application we hereby amend by annexing the following claims:

[#8. 4. A roll-holder for toilet paper consisting of a supporting plate having arms projecting therefrom and a paper-severing edge fixed between the arms near the plate; a rigid roll-holding plate pivotally hung between the arms and having a reciprocating rotary motion limited by the paper-severing edge, substantially as described.

A. Erased July 10, '85.

#9. 5. A roll-holder for toilet paper consisting of a supporting plate having arms projecting therefrom and a paper-severing edge fixed between the arms near the plate, a rigid roll-holding plate pivotally hung between the arms and having a reciprocating rotary motion, limited by the paper-severing edge, combined with an oval roll of paper supported on the pivotal plate, substantially as described.

#10. A roll-holder for toilet paper consisting of a supporting plate having arms projecting therefrom and a paper-severing edge fixed between the arms near the plate, an oval roll of paper mounted on a center plate pivoted between the arms and rotatable, together with the roll, by drawing the end of the paper, whereby one side of the roll is swung against the severing edge, substantially as described.

Erase & insert F, June 17, '85.

62

#11. 7. A roll-holder for toilet paper consisting of a supporting plate having arms projecting therefrom and a paper-severing edge fixed between the arms near the plate, an oval roll of paper mounted on a center plate having pivot connections at one side of its center with the arms and rotatable in one direction by drawing the end of the paper to swing one side of the roll against the severing edge and in the opposite direction by the overbalancing weight of one edge of the center plate, substantially as described.

Erased July 10, 1885.

[12.]* 8. A roll-supporting plate having projecting arms thereon and a paper-severing edge fixed between the arms near the plate, an oval roll of toilet paper on a suitable supporting plate pivoted between the arms and hanging normally in a position oblique to the arms, the rear edge thereof extending under the severing edge and the end of the paper on the roll depending therefrom, substantially as described.]

* [Figures in brackets erased in copy.]
[Paragraphs enclosed between rules erased in copy.]

Erased June 17, '85.

13. A hollow roll of toilet paper wound upon a semi-rigid collapsable cylinder, combined with a flat pivoted roll-holder having a length exceeding the diameter of the cylinder, supporting devices for the roll-holder and a paper-severing edge, against which the roll strikes when rotated, substantially as described.

Erase & insert G, June 17, '85.

14. A roll of toilet paper, a suitable holder therefor, substantially as described, supporting arms for the holder attached to a supporting plate, and a severing edge fixed at the side of the roll whereby a piece of paper is separated from the rolled strip and the end of the latter is permitted to hang from the roll, substantially as described.

63

15. A hollow roll of toilet paper of oval form having an internal semi-rigid tubular center-piece, substantially as described.

16. An oval roll of toilet paper in combination with an internal stiffener to maintain the roll in an oval form, substantially as described.

Insert C, June 2, '85.

17. As a new article of manufacture, a roll of toilet paper of oval form, substantially as described.

Respectfully,

CHURCH & CHURCH,
Att'ys for Applt.

May 13, 1885.

Application of OLIVER HEWLETT HICKS. No. 155,464. Filed Feb. 7, '85.

Apparatus for holding toilet paper.

To the Hon. Commissioner of Patents:

In the matter of the foregoing application we hereby amend as follows:

Immediately before the preamble to the claims insert the following:

B. Erased June 17, '85.

It is obvious from the foregoing description that a very important feature of my invention consists in the self-adjustment of the roll after it is removed from its normal position in tearing off a length, [and that the same may be effected whether the roll of paper is round or oval, or whether what is

June 17, '85.

may afford
described]* as the cutting edge [affords]* merely a stop to prevent complete revolu-

*[Words in brackets erased in copy.]
[Paragraphs enclosed between rules erased in copy.]

tion of the roll, when the sheet could be torn off, without the use of a cutting edge. The stop referred to may have any form and occupy any position on the device suitable for its purpose in preventing complete revolution of the roll, which is the object to be attained, as it could also be by causing the roll simply
64 to abut against the frame, and any other suitable mechanism, such as a spring, may be substituted for the additional weight afforded to the lower portion of the roll, to cause it after an oscillation in tearing off a length to resume its normal position and cause the free end of the roll to hang, thus rendering it accessible for the next operation.

Insert the following as claims 18 and 19:

Erased June 17, '85.

18. A holding device for toilet paper in rolls, provided with a stop operating to prevent complete revolution of a roll upon its bearings, substantially as described.

19. The combination in a holding device for toilet paper of a roll of toilet paper supported to oscillate on the device and stopped from complete revolution in tearing a length from the roll, and mechanism substantially as described operating to return the roll to its normal position after it shall be released from the strain in tearing a length from it, whereby the free end of the roll is caused to hang accessible for the next operation, as set forth.

Erase & insert H, June 17, '85.

20. A holding device for toilet paper in rolls, provided with a stop operating to prevent a complete revolution of a roll upon its bearings, and mechanism, substantially as described, to return the roll to its normal position after it shall be released from the strain in tearing a length from it, whereby the free end of the roll is caused to hang accessible for the next operation, as set forth.

Respectfully,

CHURCH & CHURCH,
Att'ys for Appl't.

June 2, 1885.

[Paragraphs enclosed between rules erased in copy.]

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{ U. S. Patent Office. }
{ Mailed June 10, 1885. }

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 9, 1885.

Room 111.

155,464. Apparatus for holding toilet paper. Feb. 9, 1885.

Oliver H. Hicks, care Church & Church, city:

This application has been considered.

Claim 1 is anticipated by the patent to B. F. Eaton, Sept. 25, 1883, No. 285,398 (stationery—ticket reels).

In regard to claim two it may be stated that the proportions embraced in this claim is a mere matter of degree and not a patentable feature. The claim is rejected.

Claim three is rejected as attempting to cover an old and well-known feature, as will be seen by reference to the following patents: J. F. Peacok, Mar. 6th, 1883, No. 273,594, and E. A. Gilson, Feb. 3, 1880, No. 224,010 (stationery—ticket reels).

Claim four is held to be anticipated by the patents to Peacock and Eaton cited above. It would not be patentable to simply substitute in the device of Eaton the oval roll of Peacock for a round roll. A center stiffening piece for the roll is too common an expedient to need a reference therefor.

Claim five is rejected as being for a notoriously common expedient.

Claim six is rejected as being functional.

66 In regard to claim seven it may be stated that the specification does not describe, nor does the drawing show that the plate D is pivotally and removably mounted in the bearing arms.

Farther than this, the patent to Eaton is held to be the full equivalent of the device sought to be covered by this claim.

Claims eight and nine, as at present advised, may be allowed.

Claim ten, when fairly construed, must be held to be substantially the same in scope as the ninth.

The fact that claim ten refers to the manner of operating the roll does not lend patentability to this claim over the ninth.

As at present advised claims eleven and twelve may be allowed.

Claim thirteen is rejected as being vague, indefinite and ambiguous. Furthermore, the construction sought to be covered by this claim is not clearly described in the specification.

Claim fourteen is held to be destitute of patentable novelty, in view of the patent to Eaton, cited above.

Claim fifteen is rejected for the reason that it would not be patentable to simply use the ordinary semi-rigid tubular center-piece in an oval roll of toilet paper instead of in a round roll, both forms of roll being shown to be old.

Semi-rigid tubular center-pieces for stiffening the center of rolls of toilet paper may be seen by a visit to the stationery division of this department.

Claims sixteen and seventeen are anticipated by the patent to Peacock cited above.

Claim eighteen does not clearly define the construction sought to be covered by this claim. The roll, in order to be operated upon by the stop to prevent complete revolution of the same, must be a roll of an oval construction, and this construction must be set forth in the claim.

67 Claim nineteen seeks to cover functions of devices rather than the devices themselves. The mechanism for stopping the complete revolution of the roll of paper should be specifically defined. When this claim is properly drawn, it and the twentieth will be identical in scope, and cannot both be allowed.

The amendment inserted immediately preceding the preamble to the claims cannot be incorporated in the specification, for the reason that said amendment embraces matter which was not embraced in the description as originally filed, or rather not justified by such description, nor is such matter shown in the drawing. The amendment referred to should be withdrawn.

GALLATIN,
Act'g Ex'r.

W. C. S.

OLIVER H. HICKS. App's for holding toilet paper. Filed Feb'y 7th, 1885. No. 155,464.

Hon. Commissioner of Patents.

SIR: In amendment "B," filed in the above-entitled case June 2d, 1885, erase from word "and," line 5, to end of line 7; also erase "affords," line 8, and insert "may afford."

Erase claim 1 and insert:

D. Erased July 10, '85. 1. The combination with the oval roll of paper, of a support for the same provided with arms or bearings projecting forward, a stiffening piece pivotally mounted in the arms on which the roll of paper is mounted, and a tearing edge with which the paper on the roll comes into contact when the free end of the paper is pulled, and thus be torn off in sheets of limited length, substantially as described.

Erase claims 2, 3, 4, 5, 6, and insert:

68 E. Erased July 10, '85. 2. The combination with the roll of toilet paper adapted to revolve on a pivot of a cutting device, so arranged with reference to said pivot that a limited amount of paper will be severed from the roll each time the free end is pulled, substantially as described.

[Paragraphs enclosed between rules erased in copy.]

Claim 7, line 6, erase "and removably."

A reconsideration of claim 7, as amended, is requested, as the claim is limited to the exact construction shown and contains elements which the reference Eaton does not show.

Erase claims 10 and 13 and insert:

F. Erased July 10, '85.

6. The combination with the flat pivoted roll-holder and a paper-severing edge or knife, of the hollow roll of toilet paper having a semi-rigid collapsible center support mounted upon the pivoted roll-holder, substantially as described.

Erased July 10, '85.

This claim is believed to point out more clearly what was intended to be covered by the former 13th claim.

Erase claims 14, 15, 16, 17, and 18 and insert:

G. Erased July 10, '85.

9. The combination of an oval roll of toilet paper hung upon pivots of a stop for preventing a complete rotation of said roll, substantially as described.

Erase claims 19 and 20 and insert:

H. Erased July 10, '85.

10. The combination with the roll of toilet paper supported by a holder and arranged to oscillate in bearings, a device for stopping the roll from complete revolution when a length of paper is torn from it, and means for returning the roll to its normal position after it is released from the strain in tearing a length, whereby the free end of the roll is caused to hang accessible for the *the* next operation, substantially as described.

11. The combination with the roll of toilet paper supported by a holder and arranged to oscillate in bearings, a device for stopping the roll from complete revolution, a severing edge or knife 69 for assisting in the operation of tearing a length of paper from the roll, and means for returning the roll to its normal position after it is released from the strain in tearing a length, whereby the free end of the roll is caused to hang accessible for the next operation, substantially as described.

Respectfully, CHURCH & CHURCH,
Att'ys for Appl't.

June 17th, 1885.

[Paragraphs enclosed between rules erased in copy.]

Room 111.

Mailed June 27, 1885.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *June* 26, 1885.

155,464. Apparatus for holding toilet paper. Feb. 9, 1885.

Oliver H. Hicks, care Church & Church, city:

Amendment of the 17th inst. has been considered.

As at present advised claim one may be allowed.

Claim two is rejected as being too indefinite and functional.

Claim three, original seventh, is ambiguous, in that it contains a misstatement. The plate D is not pivotally mounted in the bearing arms, as set forth in this claim.

In regard to claim six it may be stated that the only differ-
70 ence between this claim and some of the others is that this claim includes the semi-rigid collapsible centre support as an element of the combination. So far as the practicability or patentability of the device is concerned it is immaterial whether this support is used with a flat roll or a round one, as is usually done.

Present claim nine is anticipated by the following patents: Eaton of record and C. C. Johnson, July 29, 1884, No. 302,735 (ticket reels). So far as the claim points out, it makes no difference whether the roll be oval or of any other shape.

Present claims 10 and 11 are too indefinite. The "means" for returning the roll to its normal position should be definitely set forth. See in this connection the Commissioner's decision in *Ex parte* Wilkins, 29 O. G., 950.

Attention is called to the fact that in claim eleven the knife and a device for stopping the roll from complete revolution are set forth as though they were separate and distinct parts of the device sought to be patented, when in fact the knife itself constitutes both the stop and severing edge, and should be so defined.

GALLATIN, *Act'g Ex.*

M. C. S.

O. H. HICKS. App's for holding toilet paper. No. 155,464.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case by erasing the specification and claims, and substituting therefor the following:

71 To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in toilet-paper fixtures, and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification and to the figures and letters of reference marked thereon.

Heretofore, toilet paper has been put up in rolls of continuous lengths and hung in suitable bearings, so as to be removed as needed; and in some instances the paper has been perforated transversely at regular intervals to enable the user to, with greater convenience, tear off portions of the requisite length, or, in lieu of this, a cutter has been arranged in proximity to the roll, to enable the quantity pulled off the roll to be conveniently severed.

A well-founded objection has been urged against each of these arrangements, to wit, that the employment of them entails a great waste of paper, since, in a large majority of instances, from the freedom with which the paper is unwound from the roll, a much larger quantity is withdrawn than is needed.

The object of my invention is to so arrange the paper as to prevent more than a given quantity of it from being withdrawn from the roll at a single operation, and so that in the act of withdrawing such given quantity it shall be automatically severed from the roll, leaving pendant from the roll a free end which shall serve as a means for withdrawing a like given quantity by the next user.

72 In order that others may acquire a full understanding of my invention, I will now proceed to describe it with reference to the accompanying drawings, in which:

Figure 1, represents a top view of the fixture and roll.

Figure 2, a longitudinal vertical section of the same.

Figure 3, an end view, and

Figure 4, a view of the core plate detached.

July 14, '85.—Figs. 5 & 6 are views of modified forms of the invention.

Similar letters of reference in the several figures indicate the same parts.

The letter A represents a plate or backing adapted to be secured to a wall or other object, and having extending from it two spring arms E E, which have near their outer ends bearings H H for the accommodation of the journals or pivots of a core plate F arranged within the roll of paper. Between the arms E E, and near their inner portions extends a plate M, the outer edge of which may be made either plain or serrated, though I, by preference, make it serrated as shown in figure 1. The roll of toilet paper B has a large central opening for the accommodation of the core plate F, and when slipped upon said core plate assumes an elongated or oval shape, as shown.

In applying the roll of paper to the fixture, the core plate is first slipped into it and is then connected to the arms E E by springing the latter outward sufficiently to permit the pivots or journals of said core plate to be entered in the bearings H H of said arms, as will be readily understood. By preference, the pivots or journals are located out of line with the centre of gravity of the plate, in order that one side of said core plate shall normally hang downward and tend to hold the roll of paper in substantially the position shown in figures 2 and 3. This result may be effected either by arranging the pivots eccentrically to the core plate or by

73 attaching them centrally thereto, and having one side of the core plate heavier than the other.

With the roll hung in the manner described, the operation of unwinding and severing paper from it is as follows:

The depending end C is grasped by the user and pulled, and the roll is thereby rotated until arrested by its upper portion coming in contact with the plate M, as shown by the dotted lines in figure 2. As soon as this arrest of the motion of the roll takes place, the depending portion of the paper becomes drawn tightly over the edge of the plate M, and can be severed at that point either by a continued pull on the paper or by a lateral tearing motion. The roll is released by the severance of the end and swings back toward first position, bringing up against the under side of the plate M, and, by the jar imparted to it by contact with said plate, causes the new end of paper to drop down into position to be grasped by the next user.

It will be observed that the plate M performs the function of a stop for arresting the forward rotation of the roll and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper, and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll.

From the preceding description, it is clear that only a limited amount of paper can be removed from the roll at any one operation, and that the circumference of the roll fixes the limit of length of the portion detached.

It may be stated that to obtain the most practical and economical results, the roll of paper when in cylindrical form, and before
74 the core plate is applied to it, should have an internal diameter of not less than twice the thickness of its superposed layers. I prefer rolls of an interior diameter of say two inches and three-quarters, and an external diameter of about five inches. When these proportions are not substantially followed, the last sheets severed from the roll will either be too short or the first sheets will be too long, resulting on the one hand in an insufficient article, and on the other hand in an unnecessary waste of material.

Insert 9, July 14, '85.

A round roll may be substituted for the oval one, in which case an arm, A^1, to throw the roll out of balance, and a distance-determining stop, A^2, must be substituted for the oval roll and weighted core plate, as shown in Fig. 6.

I do not specifically claim herein the form of construction of the oval roll, since it is made the subject-matter of a separate original application filed by me on the 10th day of July, 1885.

I claim as my invention:

1st. The combination, with an oscillating roll of toilet paper, actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described.

Erased July 14, '85. 2nd. The combination, with an oscillating roll of toilet paper, actuated in one direction by a pull upon its free end, of a knife or cutter co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, substantially as described.

2 [3rd].* The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

75 [4th]* 3. The combination, with an oscillating roll of toilet paper having its bearings out of line with its centre of gravity, and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed, the roll will automatically resume its normal position, substantially as described.

Erased July 14, '85. 5th. The combination, with an oscillating roll of toilet paper having its bearings out of line with its center of gravity, and actuated in one direction by a pull upon its free end, of a knife or cutter for co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, the eccentric hanging of the roll returning it automatically to its normal position, substantially as described.

4 [6th].* The combination with an oscillating roll of toilet paper, a cutter co-operating to sever the unwound portion when the roll has reached the limit of its movement in one direction, and means substantially as described for automatically bringing the roll back to normal position, as set forth. Insert G, Aug. 10, '85.

7th. The combination, with an oscillating roll of paper of elongated or oval form, actuated in one direction by a pull upon its free end, of a stop for arresting said roll at the limit of its motion when so actuated, substantially as described.

Erased July 14, '85. 8th. The combination with an oscillating roll of paper of elongated or oval form actuated in one direction by a pull upon its free end.

* [Figures and letters in brackets erased in copy.]
[Paragraphs enclosed between rules erased in copy.]

8th. The combination with an elongated or oval oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a knife or cutter co-operating with the roll to sever the unwound portion therefrom, when the roll has reached the limit of its motion when so actuated, substantially as described.

76 9th. The combination with the supporting arms, of a plate or cutter extending between said arms and an oscillating core plate having its bearings in said arms and adapted to hold a roll of paper, substantially as described.

10th. The combination with the supporting arms of an oscillating plate weighted on one side of its pivots so as to cause the roll supported by it to automatically resume its normal position after being oscillated, substantially as described.

11th. The combination of the back plate, the supporting arms, the plate forming the cutter and the oscillating core plate, the whole arranged and operating, substantially as described.

OLIVER HEWLETT HICKS,
By CHURCH & CHURCH, *His Att'ys.*

July 10, '85.

O. H. HICKS. App's for holding toilet paper. No. 155,464. Filed Feb'y 7, 1885.

Hon. Commissioner of Patents.

SIR: Please amend the above-entitled case by inserting after line 11, page 2, the following:

"Figures 5 and 6 are views of modified forms of the invention."

Also on page 4, after line 15 insert:

"Instead of weighting the core plate to cause it to return the roll after the latter has been oscillated in one direction
I. by the pull on the paper, a spring S may be arranged on the core plate in such manner as to strike one of the arms E, and by its rebound return the roll to first position, as shown in figure 5.

77 Same page, line 17, after "arm" insert "A." Line 18, same page, after "stop" insert "A^2," and after said line insert, "as shown in figure 6."

Erase claims 2, 5, 7, 8, 9, 10 and 11.

We file herewith a new sheet of drawing.

Respectfully, CHURCH & CHURCH.

July 14th, '85.

[Paragraphs enclosed between rules erased in copy.]

{ U. S. Patent Office. }
{ Mailed July 30, 1885. }

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE.
WASHINGTON, D. C., *July 29th*, 1885.

No. 155,464. App's for holding toilet paper. Filed February 9, 1885.

Oliver H. Hicks, care Church & Church, present:

Amendments of July 10th and 14th considered. The third claim is rejected as a duplication of claim 1. Applicant is advised to amend in view of an interference with pending applications.

GALLATIN, *Examiner*.

V. N.

78 O. H. HICKS. Appts. for holding toilet paper. No. 155,464. Filed Feb'y 7th, 1885.

Hon. Commissioner of Patents.

SIR: The examiner's criticism that the 1st and 3rd claims are the same, does not seem to us to be well taken. The first claim is for a combination of two elements, an oscillating roll of paper and a stop for limiting the motion of said roll, while the 3rd is for a stop and an oscillating roll of paper having its bearing out of line with its centre of gravity, a limitation not imposed upon the first claim, a new and clearly distinguishable element being involved. It is not absolutely necessary to the operation of the device covered by the first claim, that it have its bearings out of line with its centre of gravity, for instance in the modification shown in figure 6 is shown a construction not covered by the third but fully covered by the first claim. This is allowable because it is not necessary that all the claims cover a modification if one is broad enough to do so.

Add the following claim:

> 5. The combination, with the supporting arms, of an oscillating core plate weighted on one side of its pivots, so as to cause the roll supported by it to automatically J. resume its normal position after being oscillated, and a stop for limiting the motion of said plate, substantially as described.

This claim was the original 5th claim in application No. 171,801 (a division of this case) and was erased at the suggestion of the examiner.

The claim is not the same as the 1st claim in this case, for the reason that the first is not limited to a weighted core plate nor to a weighted roll, while this is. Nor is it the same as the 3rd
79 claim, because the latter is limited to a roll having its bearings out of line with its centre of gravity, while no mention is made of such a device in this claim, and an operative construc-

tion is covered, not necessarily so complete a device, but an operative one for all that.

Another element of the 1st and 3rd claims is the roll of paper, which is not included in the third claim, the latter being designed to cover the fixture, so that a person making the fixture alone will be liable even though he does not supply the paper for it.

A reconsideration and early action in this case is requested.

Respectfully, CHURCH & CHURCH,
Att'ys for Appl't.

Aug. 10, '85.

{ U. S. Patent Office. }
{ Mailed Aug. 27, 1885. }

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *August 26th*, 1885.

Oliver Hewlett Hicks, care Church & Church, present:

Please find below a copy of a communication from the examiner concerning your application for apparatus for holding toilet paper, filed February 9th, 1885, serial No. 155,464.

Very respectfully, M. V. MONTGOMERY,
Commissioner of Patents.

80 Room No. 111. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the — day of ——, 188–, with the subject of the invention and the name of party filing it indorsed on the envelope.

The subject-matter involved in the interference is:

A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon and in the opposite direction by a weight, and a stop for limiting the movement.

Embraced in the first claim of Charles C. Johnson, of Springfield, Vermont, whose attorney of record is J. N. McIntire (box 3506) New York city, N. Y., and in applicant's first, second, and fifth claims.

The subject-matter of the issue is also involved in applicant's third claim.

GALLATIN, *Act'g Ex.*

81 DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept. 4th*, 1885.

{ U. S. Patent Office, Sep. 15, 1885. Ex'r of interferences. }

Oliver Hewlett Hicks, care Church & Church, present:

Please find below a copy of a communication from the examiner

concerning your application for apparatus for holding toilet paper, filed February 9th, 1885, serial No. 155,464.

Very respectfully, M. V. MONTGOMERY,
Commissioner of Patents.

Room No. 111. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the 8th day of Oct., 1885, with the subject of the invention and name of party filing it indorsed on the envelope. The subject-matter involved in the interference is:

A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and in the opposite direction by a weight and a stop for limiting the movement.

The interfering applicants are:

82 Seth Wheeler, of Albany, N. Y., whose attorney is A. J. Todd, 261 Broadway, New York city, N. Y.

Chas. C. Johnson, of Springfield, Vermont, whose attorney is J. N. McIntire, box 3506, N. Y. city, N. Y., and

Chas. C. Johnson, whose attorney is Henry A. Chapin, of Springfield, Mass.

The issue is embraced in:

Wheeler's third claim.

Johnson's (McIntire, att'y) first claim.

Johnson's (Chapin, att'y) fifth claim, and

Applicant's first, second and fifth claims.

The subject-matter of the issue is also involved in applicant's third claim.

GALLATIN, *Act'g Ex.*

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *Sept. 4th*, 1885.

Examiner of interferences:

An interference is found to exist between the following cases, and in respect to the invention therein specified, to wit:

Cases.

1. Oliver Hewlett Hicks, of Chicago, Illinois, for toilet-paper holder, filed Feb. 9, 1885, ser. No. 155,464, whose attorneys are Church & Church, of Washington, D. C.

83 2. Seth Wheeler, of Albany, N. Y., for fixture for toilet-paper rolls, filed March 19, 1885, ser. No. 159,392, whose attorney is A. J. Todd, of 261 Broadway, N. Y. city, N. Y.

3. Charles C. Johnson, of Springfield, Vermont, for toilet-paper fixture, filed June 22, 1885, ser. No. 169,364, whose attorney is Henry A. Chapin, of Springfield, Mass.

4. Charles C. Johnson, of Springfield, Vermont, for paper-holder, filed June 6, 1885, ser. No. 167,875, whose attorney is J. N. McIntire, box 3506, N. Y. city, N. Y.

Invention.

A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and in the opposite direction by a weight and a stop for limiting the movement.

Embraced in—
Johnson's (167,875) first claim and
Johnson's (169,364) fifth claim,
Wheeler's (—) third claim, and
Hicks' (—) first, second and fifth claims.

The subject-matter of the issue is also involved in Hicks' third claim.

D. B. GALLATIN, *Act'g Ex'r.*

84

U. S. Patent Office.
Mailed Nov. 25, 1885.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *November 25th*, 1885.

(U. S. Patent Office, Nov. 27, 1885.)

(Ex'r of interferences.)

Oliver Hewlett Hicks, care Church & Church, present:

Please find below a copy of a communication from the examiner concerning your application for a toilet-paper holder, filed Feb'y 9th, 1885, serial No. 155,464.

Very respectfully, M. V. MONTGOMERY,
Commissioner of Patents.

Room No. 111. All communications should be addressed to "The Commissioner of Patents, Washington, D. C."

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the 27th day of December, 1885, with the subject of the invention, and name of party filing it, indorsed on the envelope.

The subject-matter involved in the interference is:

85 A weighted core plate or roll adapted to be moved in one direction by a pull upon the paper mounted thereon, and to be returned in the opposite direction by gravity and a stop for limiting the movement.

The interfering applicant is—

Robert J. Coffey, of Windsor, Vermont, whose attorney is J. N. McIntire, of New York city, N. Y. (box 3506).

The issue is embraced in all of Coffey's claims, and in your first, second, third and fifth claims.

ALBERT F. ROGERS,
Act'g Exam.

OLIVER H. HICKS. Toilet-paper fixture. Filed February 9th, 1884. No. 155,464.

Hon. Commissioner of Patents.

SIR: I hereby withdraw from the above-entitled case as principal attorney, and request that Messrs. Church & Church (a firm composed of Melville and J. B. Church) of Washington, now acting as associate attorneys, be recognized as principals, and that all notices, letters and other communications be directed to them.

Very respectfully, JAMES M. HICKS,
Att'y for O. H. Hicks.

Jan'y —, 1886.

Notice of allowance Jan. 25, 1887.

86 UNITED STATES PATENT OFFICE,
ASSIGNMENT DIVISION, *Jan.* 27, 1887.

Chief of issue and Gazette division:

No assignment found of record up to and including date.

Application of O. H. Hicks, serial No. 155,464.

W. A. G.,
For Assignment Division.

Memoranda of Fee Paid at U. S. Patent Office.

Serial No. 155,464, 1887. Inventor, Oliver H. Hicks. Patent to be issued to Morgan Envelope Company. Name of invention as allowed, apparatus for holding toilet paper. Date of payment, January 27th, 1887. Fee, $20, final. Solicitors, Church & Church. Date of filing, Feb'y 7, 1885. Date of circular of allowance, Jan'y 25th, 1887. Send patent to Morgan Envelope Company, Springfield, Mass.

87 Serial No., 155,464. Ex'r Book No. $47\frac{1}{33}$.

1885. Patent No. 357,993.

Oliver Hewlett Hicks, of Chicago, county of Cook, State of Illinois.

Invention: Apparatus for holding toilet paper.

Parts of application filed.
- Petition, Feb. 7, 1885.
- Affidavit, " " "
- Specification, Feb. 7, 1885.
- Drawing, " " "
- Model, none required.
- Specimen.
- First fee, cash, $15, Feb'y 9, 1885.
- " " cert.

App. filed complete, Feb. 9, '85.
Examined Jan. 24, '87. Wm. Burke.
Countersigned: T. W. Dick Bullock, for Commissioner.
Jan. 25, '87.
Notice of allowance, Jan. 25, 1887.
Final fee, cash, $20, Jan. 27, 1887.
" " cert., —— —, 188–.
Patented Feb'y 15, 1887.
Att'y- or P. O. address, Church & Church, city.

88 1885.

Contents.

Application papers.
1. Asso. power of att'y, March 18, '85.
2. Sub. spec., March 19, 1885.
3. Amend't A, May 13, '85.
4. Amend't B, C, June 2, '85.
5. June 9th, 1885. Rejection.
6. Amend't D, H, June 17, '85.
7. June 26, 1885. Rejection.
8. Sub. spec., July 10, 1885.
9. Amend't I, July 14, 1885.
10. Rejection, July 29, 1885.
11. Amend't J, Aug. 10, 1885.
12. Intf. letter, Sept. 4, 1885.
13. Decided for Hicks, Nov. 15, '85.
14. Intf. letter, Nov. 25, 1885.
15. Letter, Jan. 19, 1886.
16. Dec'n favorable, Jan. 19, 1887.
17. Brief, Jan. 22, '87.

Title: Improvement in apparatus for holding toilet paper. 120.
Stationery, ticket reels.

91 UNITED STATES PATENT OFFICE.

OLIVER HEWLETT HICKS, of Chicago, Illinois.

Apparatus for Holding Toilet-paper.

Specification forming part of Letters Patent No. 357,993, dated February 15, 1887. Application filed February 9, 1885. Serial No. 155,464. (No model.)

To all whom it may concern:

Be it known that I, Oliver Hewlett Hicks, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful improvements in toilet-paper fixtures; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

Heretofore toilet-paper has been put up in rolls of continuous lengths and hung in suitable bearings so as to be removed as needed, and in some instances the paper has been perforated transversely at regular intervals to enable the user to, with greater convenience, tear off portions of the requisite length; or in lieu of this a cutter has been arranged in proximity to the roll to enable the quantity pulled off the roll to be conveniently severed. A well-founded objection has been urged against each of these arrangements—to wit, that the employment of them entails a great waste of paper, since in a large majority of instances, from the freedom with which the paper is unwound from the roll, a much larger quantity is withdrawn than is needed.

The object of my invention is to so arrange the paper as to prevent more than a given quantity of it from being withdrawn from the roll at a single operation, and so that in the act of withdrawing such given quantity it shall be automatically severed from the roll, leaving pendent from the roll a free end, which shall serve as a means for withdrawing a like given quantity by the next user.

In order that others may acquire a full understanding of my invention, I will now proceed to describe it with reference to the accompanying drawings, in which—

(Here follow diagrams marked pp. 89 & 90.)

Figure 1 represents a top view of the fixture and roll; Fig. 2, a longitudinal vertical section of the same; Fig. 3, an end view, and Fig. 4 a view of the core-plate detached. Figs. 5 and 6 are views of modified forms of the invention.

Similar letters of reference in the several figures indicate the same parts.

The letter A represents a plate or backing adapted to be secured to a wall or other object, and having extending from it two spring-

(No Model.) 2 Sheets—Sheet 1.

O. H. HICKS.

APPARATUS FOR HOLDING TOILET PAPER.

No. 357,993. Patented Feb. 15, 1887.

Figure 1.

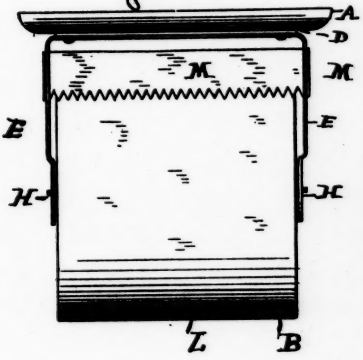


Figure 2.

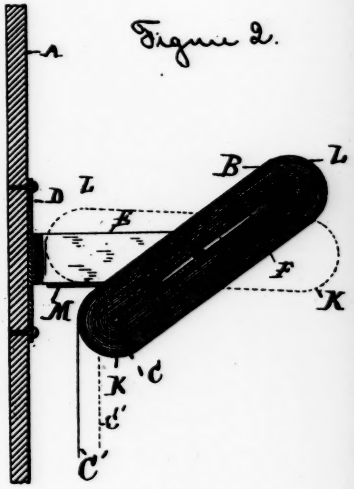


Figure 3.

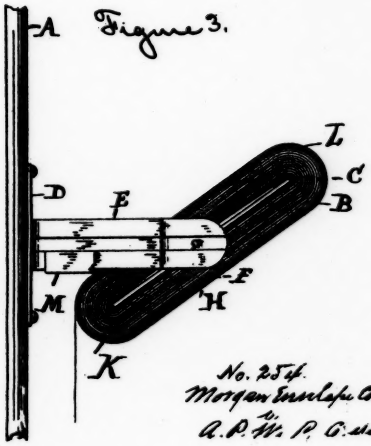
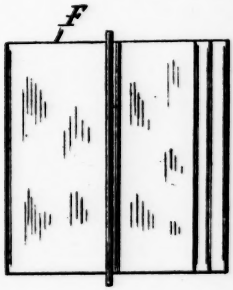


Figure 4.



No. 254.
Morgan Envelope Co. } p. 89
A. P. W. P. Co. vs.

WITNESSES
J. H. Bowman
Fred Bowman

INVENTOR
Oliver Howlett Hicks
By his Attorney
Jesse Hicks

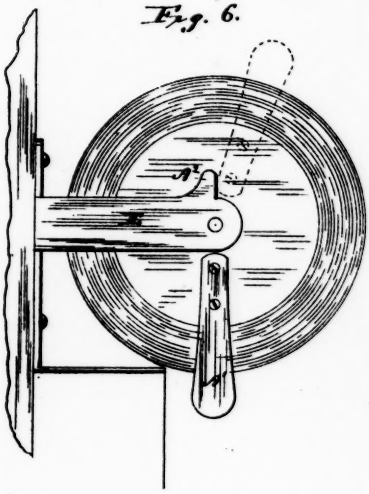
(No Model.) 2 Sheets—Sheet 2.

O. H. HICKS.

APPARATUS FOR HOLDING TOILET PAPER.

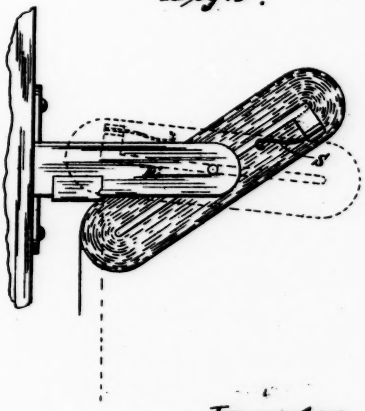
No. 357,993. Patented Feb. 15, 1887.

Fig. 6.



No. 254
Morgan Envelope Co
vs.
A. P. W. P. C. et al. } p. 90

Fig. 5.



Witnesses.
Chas. A. Burt
Frank Bigelow

Inventor
Oliver Hewlett Hicks
By Church & Church
his Attorneys.

arms, E E, which have near their outer ends bearings H H, for the accommodation of the journals or pivots of a core-plate, F, arranged within the roll of paper. Between the arms E E, and near their inner portions, extends a plate, M, the outer edge of which may be made either plain or serrated, though I by preference make it serrated, as shown in Fig. 1.

The roll of toilet-paper B has a large central opening for the accommodation of the core-plate F, and when slipped upon said core-plate assumes an elongated or oval shape, as shown.

In applying the roll of paper to the fixture the core-plate is first slipped into it and is then connected to the arms E E by springing the latter outward sufficiently to permit the pivots or journals of said core-plate to be entered in the bearings H H of said arms, as will be readily understood. By preference the pivots or journals are located out of line with the center of gravity of the plate, in order that one side of said core-plate shall normally hang downward and tend to hold the roll of paper in substantially the position shown in Figs. 2 and 3. This result may be effected either by arranging the pivots eccentrically to the core-plate or by attaching them centrally thereto and having one side of the core-plate heavier than the other.

With the roll hung in the manner described, the operation of unwinding and severing paper from it is as follows: The depending end C is grasped by the user and pulled, and the roll is thereby rotated until arrested by its upper portion coming in contact with the plate M, as shown by the dotted lines in Fig. 2. As soon as this arrest of the motion of the roll takes place the depending portion of the paper becomes drawn tightly over the edge of the plate M, and can be severed at that point, either by a continued pull on the paper or by a lateral tearing motion. The roll is released by the severance of the end and swings back toward first position, bringing up against the under side of the plate M, and by the jar imparted to it by contact with said plate causes the new end of paper to drop down into position to be grasped by the next user.

92 It will be observed that the plate M performs the function of a stop for arresting the forward rotation of the roll and holding the roll while the section of paper is being removed, as well as the function of severing said section of paper; and its importance as a stop is as great, if not greater, than its importance as a cutter, since the stopping of the roll, coupled with the continued movement of the free end of the paper, must necessarily cause the severance of the paper at some point at or near the point the end leaves the body of the roll.

From the preceding description it is clear that only a limited amount of paper can be removed from the roll at any one operation, and that the circumference of the roll fixes the limit of length of the portion detached.

It may be stated that to obtain the most practical and economical results the roll of paper, when in cylindrical form, and before the core-plate is applied to it, should have an internal diameter of not less than twice the thickness of its superposed layers.

I prefer rolls of an interior diameter of, say, two inches and three-quarters and an external diameter of about five inches. When these proportions are not substantially followed, the last sheets severed from the roll will either be too short or the first sheets will be too long, resulting on the one hand in an insufficient article, and on the other hand in an unnecessary waste of material.

Instead of weighting the core-plate to cause it to return the roll after the latter has been oscillated in one direction by the pull on the paper, a spring, S, may be arranged on the core-plate in such manner as to strike one of the arms E and by its rebound return the roll to first position, as shown in Fig. 5.

A round roll may be substituted for the oval one, in which case an arm, A′, to throw the roll out of balance, and a distance-determinating stop, A^2, must be substituted for the oval roll and weighted core-plate, as shown in Fig. 6.

I do not specifically claim herein the form of construction of the oval roll, since it is made the subject-matter of a separate original application filed by me on the 10th day of July, 1885.

I claim as my invention—

1. The combination, with an oscillating roll of toilet-paper, actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described.

2. The combination, with an oscillating roll of toilet-paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

3. The combination, with an oscillating roll of toilet-paper having its bearings out of line with its center of gravity and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed the roll will automatically resume its normal position, substantially as described.

4. The combination, with an oscillating roll of toilet-paper, of a cutter co-operating to sever the unwound portion when the roll has reached the limit of its movement in one direction, and means, substantially as described, for automatically bringing the roll back to normal position, as set forth.

5. The combination, with the supporting-arms, of an oscillating core-plate weighted on one side of its pivots, so as to cause the roll supported by it to automatically resume its normal position after being oscillated, and a stop for limiting the motion of said plate, substantially as described.

OLIVER HEWLETT HICKS.

Witnesses:
THEO. L. BERGEN.
C. S. WHEELER.

(No Model.)

J. F. PEACOCK.

TOILET PAPER POCKET CASE.

No. 273,594. Patented Mar. 6, 1883.

No. 254.
Morgan Envelope Co. } p. 93
A. P. W. P. C. Wal.

FIG. 1.

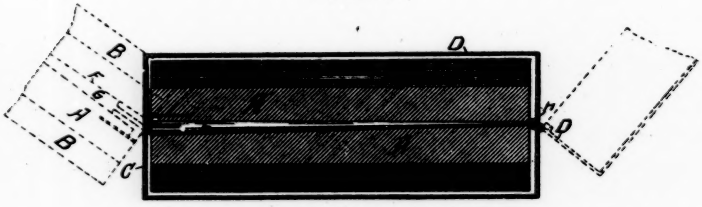
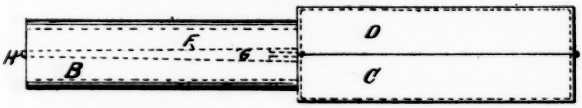


FIG. 2.

FIG. 3.



WITNESSES.
Saml. F. Hay
Thos. A. Conway

INVENTOR.
Jos. F. Peacock
By Boyd Elliot
Atty

94 UNITED STATES PATENT OFFICE.

JOB F. PEACOCK, of New York, N. Y.

Toilet-paper Pocket-case.

Specification forming part of Letters Patent No. 273,594, dated March 6, 1883. Application filed October 11, 1880. Renewed November 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, Job Francis Peacock, of the city, county, and State of New York, have invented new and useful improvements in a toilet-paper pocket-case, of which the following is a specification.

This invention pertains to that class of articles used in toilet-rooms for supplying medicated or other paper for the water-closet; and the invention consists of a toilet-paper case composed of a two-part case for holding the toilet-paper, a core hinged at one end to one part of the case, with the other half of the case hinged to the other end, and a covering of paper.

(Here follows diagram marked p. 93.)

In the drawings, figure 1 is a section longitudinally of the case and spool, and also shows in dotted lines the parts when partially opened. Fig. 2 is a transverse section of the parts when folded together in the case. Fig. 3 is an exterior view of the parts when in condition to be used.

At A is represented a spool or core, upon which the paper is wound as a band, as shown at B. Said core or spool is preferably of oval form in cross-section to give the paper covering the same form, so that either the edges or the sides may be used, as desired or most fitting to the parts to be used. Said core is hinged to one end of one-half of a case or shell, as at C, which may be formed of sheet metal or tin or brass, or of papier-maché or rubber-celluloid, or other convenient and suitable substances, and which is of oval form to correspond to the core and its covering of paper, as represented in the drawings, and in which form the core, with its paper covering, may be folded, and then inclosed by a cover, as at D, forming the other half of the case, and which is hinged to the other half of the shell or case, as represented in Fig. 1, when the parts are all folded together, as shown in the section, and in which condition it may be carried in the pocket as easily as any other toilet article; but when the paper is required to be used the cover D is first turned back, as shown in dotted lines, Fig. 1, and then the core, with its paper covering, is turned out at the other end, as shown in Fig. 1, or until it is in the position shown in Fig. 3, and then the cover D is turned over the part B, as shown at Fig. 3, and thereby the two parts of the shell or core serve as a handle to the paper-covered core, which may be used instead of the ordinary toilet-paper, and then said soiled

portion may be removed by tearing it from the rest of the roll, after which the core and its paper covering is again folded into the case or shell, ready to be returned to the pocket.

The paper covering may be wound upon the core and fastened in various ways—as, for example, during the process of winding there may be a line of gum laid upon the inner edge, or that next to the hinged end, so that it will be held in a compact roll upon the core; or it may be held by a strong elastic band in the same end of the core, which will hold it firmly upon the core when used; or it may be wound upon a form corresponding to the shape of the core desired, and then it may be slipped on over the core and fastened thereon by a touch of gum, or a band to compress it on the core, or in other convenient manner.

The surface of the core may be corrugated circumferentially, so that when the paper is wound tightly on it small corrugations will be formed in the paper, to serve as a rasping or roughened surface. The said core may be made of wood, and instead of being hinged itself to the end of the case, as shown, may have a hole through its center, as represented by the dotted lines at F, to fit over a metal core, as at G, one end of which is pivoted to the shell or case C, and the other end, as at H, can rest in a bearing in the other end of the case, and thus be held firmly in the case or shell when the wrapper of the paper is not large enough to fill the cavity. The core may also be formed of pasteboard, and it may be of other form from that shown in the drawings; but this form is preferred; and

I therefore claim—

1. In combination with a two-part case for holding toilet-paper, a core hinged at one end to one part of the case, and a covering of paper, as and for the purposes set forth.

2. In combination with a two-part case for holding toilet-paper, the core hinged at one end to one part of the case, with the other half of the case hinged to the other end, as hereinbefore set forth.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JOB FRANCIS PEACOCK. [L. S.]

Witnesses:

EUGENE N. ELIOT.

BOYD ELIOT.

95 DEFENDANTS' EXHIBIT O. K. BILL No. 20. A. M. T., Spec. Ex'r.

All bills subject to sight draft at our option after thirty days—card board and cut cards a specialty.

ALBANY, N. Y., *July* 2, 1887.

Albany Perforated Wrapping Paper Co. bought of Hudson Valley Paper Company, Walker & Jones, proprietors, wholesale paper dealers, 520 & 522 Broadway and 33 James street.

Terms: Net cash.

12 doz. bronze oval King fixtures, $3.00	$36 00
Add 5 %	1 80
	37 80

Duplicate.

96 DEFENDANTS' EXHIBIT RICHARDSON ASSIGNMENT, MORGAN ENVELOPE COMPANY. William O. Day, Notary Public. (Seal.)

Assignment of an Entire Interest before the Issue of Letters Patent.

Whereas, I, Henry B. Richardson, of Amherst, State of Massachusetts, county of Hampshire, have invented a certain new and useful invention or improvement in rolled strips of toilet paper, for which I have made application for letters patent of the United States, dated September 28, 1885, serial No. 178,392; and whereas, the Morgan Envelope Company of Springfield, county of Hampden, State of Massachusetts, is desirous of acquiring an interest in said invention and in the letters patent to be obtained therefor:

Now, therefore, to all whom it may concern, be it known that for and in consideration of the sum of one dollar, to me in hand paid, the receipt of which is hereby acknowledged, I, the said Henry B. Richardson, have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over unto the said Morgan Envelope Company the full and exclusive right to the said invention, as fully set forth and described in the specification prepared and executed by me preparatory to obtaining letters patent of the United States therefor; and I do hereby authorize and request the Commissioner of Patents to issue the said letters patent to the said Morgan Envelope Company, as the assignee of my entire right, title and interest in and to the same, for the use and behoof of the said Morgan Envelope Company, and for the use and behoof of its legal representatives.

In testimony whereof, I have hereunto set my hand and affixed my seal this 30th day of September, A. D. 1885.

HENRY B. RICHARDSON.

In presence of—

——, ——.

97 Circuit Court of the United States for the Northern District of New York.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY and SETH WHEELER, Defendants,
} In Equity. No. 5645.

and

Circuit Court of the United States for the District of Massachusetts.

MORGAN ENVELOPE COMPANY, Complainants,
vs.
WILLIAM J. MORTON, Defendant.
} In Equity.

Certification of the annexed copies of papers from the files of the interference case of Richardson *vs.* Hicks is hereby waived.

Washington, D. C., April 17, 1889.

CHURCH & CHURCH,
Of Counsel for Complainants.

98 DEFENDANTS' EXHIBIT INTERFERENCE NOTICE, RICHARDSON, HICKS, AND JOHNSON CASE. A. M. T., Spec. Ex'r.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
WASHINGTON, D. C., *October* 22, 1885.

Oliver Hewlett Hicks, care Church & Church, present:

Please find below a copy of a communication from the examiner concerning your application for "bundles of toilet paper," filed July 17, 1885, serial No. 171,894.

Very respectfully, M. V. MONTGOMERY,
Commissioner of Patents.

Your case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the rules.

The statement demanded by rule 105 must be sealed up and filed on or before the 19th day of November, 1885, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is a bundle of toilet paper, consisting of a web or strip wound upon itself, and having a line of coincident cuts extending transversely across the web and reaching through all the thicknesses of paper, embraced in your first and second claims and the first claim of Henry B. Richardson of Amherst, Mass., whose attorney is W. A. Bartlett (associate) of Washington, D. C.

The subject-matter of the issue is also involved in the second and third claims of Richardson.

99 DEFENDANTS' EXHIBIT RICHARDSON'S PRELIMINARY STATEMENT IN INTERFERENCE CASE WITH HICKS AND JOHNSON. William O. Day, Notary Public. (Seal.)

In the Matter of the Interference, HENRY B. RICHARDSON *vs.* OLIVER HEWLETT HICKS. Subject, "roll strips of toilet paper," now pending before the Commissioner of Patents.

Preliminary Statement of Henry B. Richardson.

I conceived of the invention set forth in my application for letters patent filed September 28, 1885, No. 178,392, as early as December 15, 1883.

I first reduced my said invention to a model the latter part of December, 1883.

I disclosed my said invention to others in January, 1884.

I completed my said invention in January, 1884.

The extent of the use of my said invention, up to the date of my application for a patent, was experimental.

(Signed) H. B. RICHARDSON.

Subscribed and sworn to before me, this 16th day of November, 1885.

[SEAL.] (Signed) H. A. CHAPIN,
Notary Public.

100 DEFENDANTS' EXHIBIT HICKS' PRELIMINARY STATEMENT IN INTERFERENCE CASE WITH RICHARDSON AND JOHNSON. A. M. T., Spec. Ex'r.

In the U. S. Patent Office.

Before the examiners of interference.

JOHNSON
vs.
RICHARDSON
vs.
HICKS.

Interference. Bundles of toilet paper.

Preliminary Statement of O. H. Hicks.

COUNTY OF COOK, } ss:
State of Illinois, }

Oliver H. Hicks being duly sworn, deposes and says, that he is one of the parties to the above-entitled interference; that he conceived the invention, as mentioned in the issues, on or about the 15th day of December, 1884; that he made drawings illustrating it on or about the 22d day of December, 1884; that he first explained

it to others on or about the 22d day of December, 1884; that he first made a model embodying it on or about the 15th day — December, 1884; that he first constructed a full-sized roll, in accordance with the invention, on or about the 15th day of December, 1884, and that since said last-mentioned date about fifteen bundles have been made, all containing the invention in controversy.

O. H. HICKS.

Sworn to and subscribed before me, this 21st day of January, A. D. 1886.

JULIUS W. DYRENFORTH,
Notary Public.

101 DEFENDANTS' EXHIBIT APPEAL, BOARD'S DECISION IN INTERFERENCE CASE ON JOHNSON'S *ex Parte* APPEAL. A. M. T., Spec. Ex'r.

U. S. PATENT OFFICE, *Nov.* 19, 1886.

Before the examiners-in-chief. On appeal.

Application of Chas. C. Johnson for a patent for an improvement in toilet-paper rolls. Filed July 13, 1885. No. 171,479.

Mr. J. N. McIntire for appellant.

This is an appeal of Johnston, *ex parte*, from a decision of the primary examiner granting a motion, by Hicks, in the interference proceedings of Hicks *vs.* Johnson, for a dissolution of the interference on the ground of want of patentability in the subject-matter, thus ruling that Johnson's claims to invention are untenable. The ground for such decision is the newly discovered patent to Edwards, reissue No. 7815, July 24, 1877, the patent of Wheeler, No. 117,355, having already been passed upon and found insufficient as a reference. Some apprehension of our decision appears both on the part of applicant's counsel and on the part of the examiner; for while we clearly said that the words "having cuts or slits extending transversely from either one or both *both* of its edges," "undoubtedly relate to the web of paper rolled or unrolled," we nowhere said that "the words of the claim" relate to a web "wound or unwound," for the claim, as such, relates distinctly to a wound web or roll of such paper having such slits as a new manufacture. This distinction, which has been lost sight of, formed the only basis of patentability in our minds.

102 The case, however, was deemed a marginal one, based on the superiority of the edge slits or starters "in simplicity, reliability and cheapness" over the perforations of Wheeler's patent, in themselves old and common for other analogous purposes. The newly cited reference to Edwards now effaces that margin, for it shows that even the edge slits or starts have been used, patented, and claimed as an improvement over the perforations in a manufacture so analogous as to leave no room for invention in transfer-

ring the same artifice to the paper roll for toilet use. In this latter position we deem the examiner to be legally correct, and must, therefore, affirm his decision.

H. H. BATES,
R. S. B. CLARKE,
Examiners-in-chief.

Not having, in the formal appeal, considered Johnson's device patentable, I, of course, concur that it is not patentable now.

ROBERT J. FISHER, JR.,
Examiner-in-chief.

[Endorsed:] Case No. 14,273. Supreme Court U. S., October term, 1893. Term No., 254. The Morgan Envelope Co., appellant, *vs.* The Albany Perforated Wrapping Paper Co. *et al.* Stipulation and addition to record. Filed Oct. 9, 1893.

Supreme Court of the United States, October Term, 1893.

THE MORGAN ENVELOPE COMPANY, Appellant,
v.
THE ALBANY PERFORATED WRAPPING PAPER COMPANY & SETH WHEELER, Appellees.
} Term No., 254.

Stipulation.

It is hereby stipulated and agreed that letters patent Nos. 325,174, 325,410, and 357,993, being the letters patent in suit in this cause, are owned by appellant, The Morgan Envelope Company, and that the printed copies of said letters patent found respectively immediately after page 30, at page 38, and at page 64 of the "addition to record" filed in this court Oct. 9, 1893, be given in this cause the force and effect of duly certified copies of said letters patent.

ESEK COWEN,
Counsel for Respondent.
JOSEPH B. CHURCH,
MELVILLE CHURCH,
Sol'rs & Counsel for Complainant & Appellant.

Jan. 11, 1894.

[Endorsed:] Case No. 14,273. Supreme Court U. S., October term, 1893. Term No., 254. The Morgan Envelope Co., app't, *vs.* The Albany Perforated Wrapping Paper Co. *et al.* Stipulation as to ownership of patents in suit, &c. Filed Jan'y 13, 1894.

FILED.
MAR 3 1894
JAMES H. McKENNEY,
CLERK

IN THE

Supreme Court of the United States

OCTOBER TERM, 1893.

MORGAN ENVELOPE COMPANY,
Appellant,
vs.
THE ALBANY PERFORATED WRAPPING PAPER CO. AND SETH WHEELER, *Appellees.*
} Term, No. 254.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

MELVILLE CHURCH,
J. B. CHURCH,
Counsel for Appellant.

CHAS. E. MITCHELL,
of Counsel.

PRESS OF W F ROBERTS

IN THE

Supreme Court of the United States

OCTOBER TERM, 1893.

MORGAN ENVELOPE COMPANY,
Appellant,
vs.
THE ALBANY PERFORATED WRAPPING PAPER CO. AND SETH WHEELER, *Appellees.*
} Term, No. 254.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

BRIEF FOR APPELLANT.

Statement of the Case.

This is a suit in Equity brought by the appellant against the appellees for the infringement of the following named letters patent of the United States, all granted to the inventor, Oliver Hewlett Hicks, of Chicago, Illinois, and all duly assigned by said Hicks to appellant, viz :

No. 325,410, for package of toilet paper, dated September 1, 1885.

No. 325,174, for toilet paper fixture, dated August 25, 1885; and No. 357,993, for apparatus for holding toilet paper, dated February 15, 1887.

Patent No. 325,410 is for a roll or bundle of toilet paper, so formed and proportioned as that a suitable length of paper, *i. e.*, one convolution of the roll may be conveniently and easily detached from it without the necessity of unrolling it in the customary manner; while patents Nos. 325,174 and 357,993 are for the combination of such a roll or bundle of paper, with certain co-operating mechanical elements, called a fixture, for effecting automatically the detachment of the paper, one convolution at a time, in accordance with the scheme of the roll patent.

Assignment of Errors.

Appellant makes the following assignment of errors:

1. That the court below erred in holding the roll patent void for want of novelty.

2. That it erred in holding the roll patent void by reason of the alleged prior use of Seth Wheeler's "Pocket Companion."

3. That it erred in holding that the first combination patent was not infringed by appellees.

4. That it erred in holding that the second combination patent was not infringed by appellees as to its first four claims.

5. That it erred in holding that there was no legitimate patentable combination between the roll and the fixture of appellant's combination patents.

6. That it erred in holding that the sale of the combined roll and fixture by appellant gave the purchaser the right to remake the patented combination by combining new rolls, not licensed to be made by appellant, with the old fixture element, without appellant's license or consent.

7. That it erred in holding that the appellees had the right to buy the fixture element of those who had purchased combined rolls and fixtures from appellant, and, after combining with such fixtures rolls of appellees' own manufacture, sell such combined rolls and fixtures to others without appellant's license.

8. That it erred in holding that the existence of the roll patent did not repel any inference of license to the purchasers

of the combined roll and fixtures to re-supply new rolls for use with said fixtures, or to obtain for such use rolls of any one but appellant.

The bill of complaint, filed August 11, 1887, charges the defendants with having infringed the roll patent (No. 325,410) by making, using and selling rolls of paper made in accordance with said patent, and with having infringed the two combination patents (Nos. 325,174 and 357,993) by making, using and selling rolls of paper and fixtures, in combination; by selling rolls of paper to others for use by the latter in combination with fixtures, and by selling fixtures not made by themselves, but procured from others, with rolls of paper made by themselves.

The defences set up by the answer and upon which proofs were taken are.

1. The alleged prior invention and use by Seth Wheeler, one of the defendants, of what is known in the case as the "Wheeler Pocket Companion."

2. The prior U. S. patent to Job F. Peacock, No. 273,594, dated March 6, 1883.

3. The alleged prior invention of Robert J. Coffey.

4. The alleged prior invention of Henry B. Richardson.

5. Non-infringement.

The court below decided that the roll patent (No. 325,410) was void by reason of prior use and for want of novelty; that the first combination-patent, No. 325,174, was not infringed; but that the second combination-patent, No. 357,993, was valid and infringed as to its fifth claim by the defendarts' manufacture and sale of their so-called Universal Fixture and Roll.

Appellants have appealed from so much of this decree as declares invalid the roll patent, and as declares that the first combination-patent and the first four claims of the second combination-patent have not been infringed.

Appellees took no appeal.

History of the Hicks Inventions.

The inventions described in and covered by the several patents in suit are so intimately related and connected as to be conveniently treated together in attempting a short review of their history and development.

At the time when Mr. Hicks entered the field as an improver of toilet paper packages and appliances, toilet paper had been put upon the market in the form of sheets cut to the proper size for use, and, in some instances, wired or otherwise temporarily fastened together, and in the form of cylindrical rolls composed of continuous lengths which were sometimes perforated at regular intervals to enable the user to separate them into sheets of uniform size; but both the sheet form and the roll form were objectionable because of the amount of wastage which they involved and the litter that attended their use.

Where loose or wired sheets were provided, the user was apt to detach a great many more sheets from the bundle than were required, and those not used were either carried away or fell about the floor and gave the place an untidy appearance.

Where rolls were employed, they were usually hung so as to be freely revolved, and the user, by a pull upon the depending end, would oftentimes reel off yards at a time where a much less quantity would have answered, and either carry off the surplus in his pocket or allow it to fall upon the floor; and where perforated paper was employed in roll form the amount of litter was increased by the dropping of the small particles of paper intended to have been removed by the perforating machine in forming the perforations, but which remained attached until the paper was unwound, such small particles giving especially great annoyance when they fell upon a carpeted floor, because of the extreme difficulty experienced in collecting and removing them.

Mr. Hicks realized the deficiency of these modes of putting up toilet paper and at the same time he appreciated the points of advantage presented by each. Insofar as the separate sheet

plan and the perforated web plan afforded to the user sheets of substantially the same dimensions, they were to be preferred to the unperforated web plan which involved the tearing off of indefinite lengths, while for convenience in manufacture, transportation and handling the wound roll was obviously preferable to the separate sheets.

In seeking, therefore, to produce a new and improved form of package, Mr. Hicks' object was, first, to provide a package that should have the form of a wound roll or band, for when in this form, the integrity of a package was better preserved than where separate sheets were used, and, as we have seen, the article could be more cheaply produced and was better adapted for transportation and handling; secondly, to provide a package that should, like the roll of perforated paper, afford to the user sheets of approximately the same length, and this without the necessity of subjecting the web or roll to any perforating process, which process was well known to involve not only an expensive, but an extremely difficult operation; and thirdly, to produce with the minimum amount of wastage, a package that should be of such shape and dimensions as that, in the removal of sheets therefrom, it would be most natural to separate one and only one entire convolution at a time, and which convolutions, from the opening of the package till the same was entirely consumed, should each form a sheet of a size practicable and desirable for use.

These several objects Mr. Hicks attained when he arrived at the construction of package shown, described and claimed in patent No. 325,410, here in suit, and designated in the record as the "Oval King" package.

This Oval King package was, at the date of its invention, a distinctively novel article. It contains about as much paper as an ordinary separate-sheet package of toilet paper or an ordinary perforated or unperforated roll of toilet paper, such as is found on the market every where, but its form and plan of construction are such as to impart to it capabilities and attributes peculiar to itself.

As we look at it, it appears to be an oblong oval-shaped bundle of fine toilet paper about five inches wide and six inches long. Examined more critically, we find it to be composed of a continuous web of paper wound into the form of a band about a pasteboard or thick paper center or core; that its ends are short and rounded; that when we pick it up and run one hand into it and pull with the other hand upon the free end of paper depending from it, the paper separates neatly at the upper rounded end of the bundle, yielding a sheet which, when folded, is of suitable dimensions for use. Continuing to pull off other sheets in the same manner, we observe that, almost invariably, as we cause the severance of one sheet, the end of the next sheet drops down into position to be grasped for the next operation, and continuing further to pull off sheets until the package is entirely used up, we find that the last sheet does not differ greatly from the first one we took off, and that it is large enough for use, when folded, just as the first one was.

If, instead of holding the package on our hand, we hang it up on a projecting peg, we find that it does not revolve, as a round roll would, but remains vertical and enables us to take off one convolution at a time, as before.

If we lay the package down, we find that it stays where we put it; if we drop it, it does not run across the floor and pay out a long length of paper, as a round roll would, but falls and stays flat, with possibly only a short end protruding. If we attempt to pack a number of the packages in a box, we find that they occupy much less space than would an equal number of ordinary round rolls representing the same amount of paper.

Let us now take up an ordinary round or cylindrical roll of toilet paper and attempt to go through the same operations.

To begin with, we cannot put our hand into its central aperture, as we did with the Oval King package, because it is only an inch and one-eighth in diameter and will not admit it; at best, we can only insert the ends of a couple of fingers. Assuming, then, that we can do as much as that, let us proceed.

We catch hold of the depending end, and attempt to tear off a sheet by straining it along the top of the roll, but here we encounter difficulty number two, the circle of the round roll being larger than that of the short rounded end of the Oval King package, and, consequently, not so nearly approximating an angle, the tearing of the paper is not prompt, and when it does give way the line of severance is very irregular. As we continue to tear off sheets, we find that the line of separation is scarcely ever twice at the same place, and that the end for the next sheet *never* drops down into position to be grasped, as it did in operating upon the Oval King package; but perhaps the most striking difference will appear when it is observed that when the round roll is only about two-thirds used up, the convolutions taken off are entirely too short to be used when doubled and that first one and one-half, then two, then several convolutions will have to be removed before a sheet will be afforded large enough for use with convenience and safety; from which it would appear that, pursuing the method of removing sheets adopted in the case of the Oval King package, one-third of the round roll would be rejected as waste.

The difficulties encountered in manipulating a round roll would of course be increased if the round roll was composed of perforated paper, for with such paper the separation instead of occurring at the *top* of the roll is liable to occur at the line of perforation next adjacent thereto.

From this comparison it plainly appears, that the ordinary round roll and the Oval King package are not, by any means, the same thing and have not the same attributes and capabilities.

But, it may be argued, are not the described differences simply accidental and due entirely to mere changes in proportions, such as every one is entitled to make in constructing a roll of toilet paper?

Our reply is, emphatically, no.

The differences are not accidental but intentional, the changes not merely of proportions but of entire plan of construction. Every new attribute and capability of the Oval King package is

the result of careful painstaking thought and investigation, of many abortive efforts and unsuccessful experiments, of time and money expended, in a word, of *patentable invention* and all that goes to make it up.

The very lucid deposition given by Mr. Hicks (Record, p. 126) shows how he struggled with the problem, his failures and discouragements, and how he finally succeeded.

After having succeeded in producing the Oval King package Mr. Hicks' next step was to contrive a fixture or appliance by which such Oval King package could be conveniently held while a single convolution was removed from it at a time, according to the theory upon which said package was constructed. He testifies (Record, p. 130) that his first device consisted of a piece of wood fitted into the flattened opening of the package and held rigidly to the wall. This piece of wood took the place of the user's hand as a means for holding the package, and the paper was torn off as before. From this crude appliance he passed to a better one, consisting of a fixture with swinging arms such as had been used for holding a round roll of perforated paper, to which he added a flattened core plate that was adapted to fit the opening of the package. When a pull was given on the end of paper depending from a package mounted in this fixture, the package turned until it was stopped by meeting the fixture, when the piece of paper was torn off.

For his next device he used the fixture last described, as modified by rigidly fastening the arms at right angles to the back plate and applying a pin to the core plate in such manner as that when the paper and core plate were partially rotated the pin would strike against one arm of the fixture and be arrested, thereby enabling the paper to be torn off by continuing to pull upon it. Then followed a fixture in which he employed a plate back of the package or roll against which the latter was adapted to strike, and which plate served as a stop and a cutter combined; and from this device he proceeded, step by step, till he finally arrived at the fixture known in this

case as the Oval King Fixture, which is illustrated by Complainant's Exhibit C and X and is shown, described and claimed in his patents Nos, 325,174 and 357,993 here in suit.

This Oval King Fixture consists of a back plate, two arms extending outward therefrom at right angles, a flat metal core plate pivoted on the outer ends of the arms and made slightly heavier on one side of its pivots than on the other, and a plate or blade extending between the arms at their inner ends and performing the functions of both a stop and a cutter, as will be presently shown.

To apply a package of Oval King paper to this fixture, it is only necessary to remove the flat core plate, slip it into the elongated opening or slit in the package and then return the core plate bearing the package to its place in the arms ; then, when it is desired to remove a convolution of paper from the package, the free end of paper is pulled and the package is thereby rotated until arrested by one of its ends coming in contact with the plate between the arms. As soon as this arrest of the motion of the roll takes place, the package becomes tightly pressed against the edge of the said plate, and the depending end can be severed either by a continued pull upon it or by a lateral tearing motion such as is resorted to when the package is held upon the hand as hereinbefore described.

The package is released by the separation of the end, and swings back under the influence of the weighted core plate toward first position, bringing up against the under side of the plate between the arms with sufficient force to invariably cause the new end of paper to drop down into position to be grasped by the next user.

This Oval King Fixture and this Oval King paper were put upon the market in the early part of 1885, and from the start were received with favor (Record, p. 130).

Such marked improvements did they indeed respectively represent, that large manufacturers and dealers, appreciating at once their value, tried first to negotiate for them, then to imitate them, and, finally growing bolder, began to appropriate them bodily.

No one was more fully alive to the importance of Mr. Hicks' improvements than the defendant, Seth Wheeler. He, as the president of the defendant corporation, the Albany Perforated Wrapping Paper Company, saw that the practical monopoly which said Company had long enjoyed as furnishers of measured sheets of toilet paper in roll form, *i. e.*, rolls of perforated paper, was about to terminate ; that a rival had sprung up who promised to become a dangerous competitor.

As early as February, 1885, Mr. Munson, of Chicago, an agent of the Albany Perforated Wrapping Paper Company, procured from Mr. Hicks, in Chicago, one of the Oval King Fixtures and some Oval King paper and sent them to Mr. Wheeler, at Albany (Record, p. 39), for examination.

During the same month Mr. William J. Morton, the defendant in the Massachusetts case, also sent Mr. Wheeler an Oval King Fixture and some Oval King paper (*ibid*) and tried to negotiate with Mr. Hicks for an interest in the latter's inventions, but without success (p. 130).

Upon receiving the Oval King Fixtures and paper thus sent him, Mr. Wheeler immediately dispatched one of said fixtures and some of the paper to England, with instructions to his agent to file an application for patent there, as a communication from him, said Wheeler.

These instructions for the English application were received in England in February, 1885 (p. 162), and the provisional specification for said application was filed on the 10th day of March, 1885, and was entitled "Improvements" in Appliances for Holding or Containing Webs or "Bundles of Toilet or Wrapping Paper and in the formation of the Webs or Bundles."

Special attention is directed to this title given the English patent because it shows an attempt on the part of Mr. Wheeler to patent over there the bundle or package of paper, as well as the fixture with which it was adapted to be used, *before he had any knowledge that Mr. Hicks had applied or intended to*

apply for a patent on the package in this country, and because it shows that, at that early date, *Mr. Wheeler himself regarded the paper as a novel and patentable article.*

But proof of this is not limited to the disclosures of the title alone. In the body of the provisional specification occurs this language (p. 169):

"This invention relates to appliances for holding or containing webs or bundles of unperforated paper to be used for toilet purposes or for wrapping up articles *and to the formation of the said webs or bundles*. The chief object of the said invention is to enable pieces of unperforated paper of *limited size or length* to be readily renewed or torn from the web or bundle."

Again (p. 170):

"The paper is preferably wound on a flat cardboard core of the same breadth as the plate, so that the bundle of paper wrapped around the same is flat also."

Again:

"The pieces of paper torn off are of the same length as the circumference of the bundle."

Here was an appreciation, from a rival manufacturer, of the novelty and advantages of that bundle of paper, that, under the present circumstances, is certainly entitled to great weight.

As stated above, the English provisional specification was filed March 10, 1885. Before the complete specification was deposited Mr. Hicks himself applied for protection in England, and, learning of the filing of the application there by Mr. Wheeler, he filed a protest against the issuance of a patent to the latter.

To free himself of Mr. Hicks, Mr. Wheeler then made the following remarkable affidavit, prepared for him by his counsel, Mr. A. J. Todd, who, he swears, was "acquainted with the facts" (p. 54):

"CITY, COUNTY AND STATE OF NEW YORK, *ss:*

"SETH WHEELER, being duly sworn according to law, deposes and says as follows: That he is a citizen of the United States and a resident of the City of Albany, in the State of New York; that he is the person who communicated from abroad the invention to Henry Harris Lake, upon which an application was made. No. 3,136, of 1885.

"Deponent further says that he did not obtain a knowledge of the said invention from Oliver Hewlett Hicks, of Chicago, or of any other person; that he obtained a knowledge of the invention by seeing it in public use in the United States; that he bought one of the fixtures and rolls in the City of Chicago, Ill., having previously seen them there and elsewhere on public sale; that he immediately transmitted the same to Henry Harris Lake, with the request that he apply for British letters patent as a communication from abroad.

"SETH WHEELER.

"Sworn before me at her Brittanic Majesty's Consulate-General, New York, this 4th day of August, A. D. 1886.

"W. R. HOARE.

"*H. B. M. Consul.*"

When questioned as to the truth of this affidavit, Mr. Wheeler makes the following unique explanation in regard to it (*Ibid*):

"Int. 208. State whether or not you executed a paper like the above, and who prepared it for you?

"A. I did; it was prepared by my counsel, Mr. A. J. Todd, of New York.

"Int. 209. What did you mean by stating in this affidavit that you didn't get knowledge of the invention referred to from Oliver Hewlett Hicks, nor any other person?

"A. Why, the fixture was purchased in Chicago by our representative there, which, I suppose, in law, would be the same as myself, the statement being prepared by my counsel, who was familiar with the facts.

"Int. 210. Did you not know, at the time of making this affidavit, that Mr. Hicks, the inventor of this fixture you were trying to patent in England, was also applying, as inventor, for a patent in England, and that your oath that you did not obtain a knowledge of the said invention from Mr. Hicks, nor from any other person, was tantamount to a declaration that you were the inventor, and that it would be so considered by the English office?

"A. I did not.

"Int. 211. Was it true that you had not obtained a knowledge of the invention you sought to patent from Mr. Hicks, nor from any other person, as you swore in this affidavit?

"A. I believe it to be true, as stated in the affidavit.

"Int. 212. Question repeated.

"A. I believe it to be true.

"Int. 213. If you didn't get the knowledge from Mr. Hicks, nor from any other person, where did you get it?

"A. It was obtained by my representative at Chicago.

"Int. 214. And you got it from your representative?

"A. Yes, sir.

"Int. 215. What was his name?

"A. Mr. Munson.

"Int. 216. Isn't he a person?

"A. He is a man.

"Int. 217. And a man is a person?

"A. He should be considered so.

"Int. 218. Then if you did get your knowledge of this invention from a person who wasn't Mr. Hicks, you swore falsely in that affidavit, didn't you?

"A. Not intentionally, and I don't think I did.

"219. You stated in the affidavit that you obtained a knowledge of the invention by seeing it in public use. Where had you seen it in public use?

"A. Through my representative, Mr. Munson, at Chicago.

"Int. 220. And not with your own eyes?

"A. No.

"Int. 221. In your said affidavit you stated that you bought one of the fixtures and rolls in the city of Chicago, was that true?

"A. My representative bought it for me.

"Int. 222. Did he buy it at your request?

"A. A general request to send us at any time any novelty he saw of interest to us.

"Int. 223. In your said affidavit you also swore that immediately upon buying the fixture and roll in Chicago you transmitted the same to Henry Harris Lake, with request that he apply for British letters patent as a communication from abroad. Did you in fact transmit said fixture and roll to Henry Harris Lake with such a request?

"A. I think so, through the British Perforated Paper Company?

"Int. 224. Did you instruct them to employ Lake?

"A. Not as I remember. He is their solicitor there.

"Int. 225. Then you didn't transfer the fixture and roll to Lake, but to somebody else, isn't that the fact?

"A. I can't now say positively. My impression is the fixture was transmitted through the British Company, to whom we were making frequent shipments.

"Int. 226. On analyzing this affidavit, then, we find that you swore falsely to each material allegation of it, because you *did* obtain a knowledge of the invention from a person who was not Mr. Hicks; you *did not* see the invention in public use in the United States; you *did not* buy one of the fixtures and rolls in the city of Chicago, and you *did not* transmit said fixture and roll to Henry Harris Lake and request him to apply for British patent; and all said false statements were calculated to deceive the British patent office, and did prevent the granting of a patent to Oliver Hewlett Hicks, the true and original inventor of the said roll, and is this not apparent from your testimony?

"A. Not as I understand the statement; I did not ask for the patent as the inventor, but as the introducer."

Comment on this testimony is almost unnecessary. The attempt of Mr. Wheeler to invest Mr. Munson with a Dr. Jekyll and Mr. Hyde character would be very amusing did it not call forth such a serious criticism. When Mr. Munson gets *knowledge* of the Hicks invention, Mr. Munson is Mr. Munson; but when Mr. Munson *sees* the Hicks invention and *carries off a fixture and some paper*, Mr. Munson is Mr. Wheeler. Munson can get knowledge, but only Wheeler can carry off property.

The affidavit saved the day, however, and Mr. Hicks, the true inventor, lost the English patent.

But Mr. Wheeler does not appear to have been content with what he had pirated for his English provisional specification. In the interval between the filing of the provisional specification and the time for filing the complete specification, Mr. Hicks' United States patents, Nos. 325,174 and 325,410 issued, the one for the combination and the other for the paper, so Mr. Wheeler gets copies of these patents, sends them to England and has his agents there embody in his complete specification every single modification and detail disclosed by them. When, therefore, we look at his English patent, No. 3,146, of 1885 (p. 171), we find there patented everything that Mr. Hicks had patented in this country by said two patents down to the finest

details. Yet, notwithstanding all this, Mr. Wheeler has the temerity, the audacity, to tell the English Patent Office that "he did not obtain a knowledge of the said invention from Oliver Hewlett Hicks, of Chicago, or any other person."

The following claims taken from the English patent show that Mr. Wheeler apprehended the points of novelty in both the combination of the fixture and paper, and in the paper itself:

"1. An apparatus or appliance for holding or containing a strip or web of paper in the form of a bundle, in combination with means for limiting the extent of rotation of the said bundle, so that only pieces of limited length can be unwound and removed therefrom.

"2. The pivoted plate carrying the paper in the form of a flat or nearly flat bundle, so arranged that it will hang in an inclined position, in combination with a bar which serves for limiting the movement of the said plate and as a cutter for severing the pieces of paper substantially as described.

"3. The modification of my invention, wherein the paper in the form of a roll or cylinder is coiled upon a center piece or core, which is pivoted in arms or brackets, in combination with a stop for limiting the movement of the said paper, a blade or cutter and a counterbalance, substantially as and for the purpose set forth.

"4. A bundle of paper consisting of a strip or web, wound or coiled into an approximately flat or oval form and maintained in such form by a permanent central core adapted, if desired, to receive the bearings on which the bundle revolves, substantially as described.

"5. A bundle of paper for toilet or other purposes, consisting of a continuous strip or web wound or coiled into an approximately flat or oval form, so that its longest internal diameter is equal to or greater than twice the thickness of the superposed layers of paper and having a core forming a permanent portion thereof, substantially as described."

While Mr. Wheeler's aforesaid application for the English patent was pending, he devised an improved form of fixture for use in connection with an Oval package of perforated paper and applied for a patent on it both in this country and in England.

The English application resulted in English patent No. 9,572 of 1885, but the application filed in this country, which was deposited March 19, 1885, was declared by the Patent Office to interfere with the pending application of Mr. Hicks on the Oval King Fixture and, also, with two pending applications of one Charles C. Johnson, of Springfield, Vermont, in respect to the following subject matter, viz (p. 150):

"A weighted core plate or roll adaped to be moved in one direction by a pull upon the paper mounted thereon and in the opposite direction by a weight, and a stop for limiting the movement."

As will be seen by examining the copy of the English patent of Wheeler (No. 9,572 of 1885) offered in evidence (p. 165) and which Mr. Wheeler swears was like the United States application, the Wheeler device consisted of an oval package of perforated paper mounted upon a metal core plate that was hung by means of eccentrically arranged pivots in arms extending out from a back plate, said core plate having projections formed upon it which were adapted to strike against the arms when the free end of paper was pulled, so as to stop or arrest the roll or package and cause the sheet of paper to tear off at or near the top of such package.

When the separation of the sheet of paper thus took place. the package returned automatically by reason of its weight and that of the core plate to its normal or first position.

Mr. Wheeler claimed in his United States application just what he did in his English patent (p. 64), to wit:

"The improved appliance for holding a web or stip of paper in the form of a bundle, which appliance is provided with the stops for limiting the rotation of the said bundle, substantially as and for the purpose set forth."

It needs but a glance at claims 1, 2, 3 and 5 of the Hicks Patent No. 357,998, which claims were pending in the Hicks application involved in the said interference, to see that there

was a direct conflict of subject matter between said two applications, and that, therefore, the declaration of the interference was regular and proper. Said claims are as follows:

"1. The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon the free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described.

"2. The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

"3. The combination, with an oscillating roll of toilet paper having its bearings out of line with its center of gravity and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed the roll will automatically resume its normal position, substantially as described

"5. The combination, with the supporting arms, of an oscillating core plate weighted on one side of its pivots, so as to cause the roll supported by it to automatically resume its normal position after being oscillated, and a stop for limiting the motion of said plate, substantially as described

At the time of the declaration of this interference, each of the parties to it was called upon to file a statement under oath, technically termed a preliminary statement, setting forth when he first conceived the subject matter constituting the issue in the interference, when he first explained it to others, reduced it to practice, &c. In response to this call, Hicks filed a statement and Johnson filed a statement in respect to one of his applications only, but Wheeler defaulted and judgment was rendered against him (p. 152), from which judgment he took no appeal and it became final. Judgment was also rendered against Johnson in respect to the case in which he had filed no statement (C. R., 682).

The statement which Johnson filed in his other case (p. 153) failed to set up a date of conception by Johnson prior to the

date on which Hicks' application was filed, *i. e.*, February 9, 1885, and Johnson was notified a decision would be rendered against him on the 3d day of November, 1885, in respect to said remaining application; also, unless before that time he should notify Hicks of his intention to contest the case upon the record as then made up (*Ibid*).

On the 29th day of October, 1885, Mr. J. N. McIntire, as attorney for Johnson, gave due notice of his intention to contest the case on the record as made up (p. *Ibid.*) and the case was set down for hearing on the 10th day of November, 1885 (p. 154).

When the day of hearing came around, neither Johnson nor his attorney, McIntire, put in an appearance and final judgment was rendered against Johnson and in favor of Hicks on the record (*Ibid.*)

The reason for making this pretence of contest on the part of Johnson, was not made manifest to Mr. Hicks, till the 23d of November, 1885, when he received notice from the Patent Office that his application lately in interference with Wheeler and Johnson was adjudged to interfere, *in respect to the same identical subject matter that had constituted the issue in the former Johnson interference*, with an application of one Robert J. Coffey, of Windsor, Vermont, filed on the said 10th day of November, 1885, *the very day set for the hearing of Johnson's petition for leave to contest Hicks' right to a judgment on the record, and filed too, through J. N. McIntire, Esq., the very attorney who had been prosecuting the Johnson cases.* (p. 156.)

This began to appear like a conspiracy between Wheeler, McIntire, Johnson and Coffey to prevent Hicks from ever getting his patent, or at least to delay him as long as possible in obtaining it.

Coffey started in much better equipped for a fight than either Wheeler or Johnson had been, for he not only knew exactly when Mr. Hicks' application was filed, but having, through McIntire, access to Hicks' preliminary statement (p. 151) in the prior interference, he also knew exactly when Hicks first

conceived the invention, when he first embodied it in sketches or drawings, made a model, reduced it to practice, &c., &c.; in a word, at the commencement of the litigation, Hicks' case was an open book to him.

It was a matter of no surprise, then, to find Coffey swearing in his preliminary statement in the new interference, that he had conceived the invention in controversy as far back as 1884, or nearly a year before the date of conception given by Hicks.

Proofs were taken on both sides, and the connection between Wheeler, Johnson and Coffey satisfactorily established. It was then proven, as it has been proven in this case by the deposition of Mr. Hicks (p. 146), that on or about the 17th day of February, 1885, one H. W. Thompson, of the firm of Moore, Arms & Thompson, of Bellows Fall, Vt., toilet paper makers, called upon Mr. Hicks in Chicago, for the purpose of seeing his Oval King Fixture and paper; that he appeared very much pleased with the invention and remarked "that it was the finest thing of the kind that ever was or ever would be." Mr. Hicks gave him a fixture and some of the paper and he went away.

Thompson took the fixture and paper, carried them off to Vermont, and put them into the hands of the Charles C. Johnson hereinbefore referred to as the interference contestant, with instructions to see if he, Johnson, could not get up some other form of holder or fixture for the oval paper (p. 142). Johnson, who was an inventive fellow, succeeded in getting up some modified forms of fixtures for dealing with the oval paper, and straightway, at the request of Thompsen, made applications for patents for the same through McIntire, the attorney, assigning all his right, title and interest in said inventions to Thompson.

This accounts for the presence of the Johnson applications in the Patent Office.

When the interference was declared between the said applications of Johnson and the application of Hicks, and judgment finally rendered against Johnson, this same Thompson procured Coffey to file another interfering application, using as a basis or foundation for such application some old abandoned experi-

ments that Coffey had made with ordinary rolls of perforated paper and the ordinary fixture used in connection therewith.

During the taking of the testimony, Coffey and Thompson were assisted by Wheeler (pp. 45, 59 *et seq.*), but all to no purpose, for the three several tribunals in the Patent Office that considered the evidence, to wit, the Examiner of Interferences, the Board of Examiners-in-chief, and the Commissioner, in person, all without a single dissent, decided that Coffey had never done what he claimed to have done, and that, at most, what he claimed to have done amounted to an abandoned experiment. The decision of the Examiner of Interferences is printed at p. 160; that of the Board of Examiners-in-chief at p. 156; and that of the Commissioner at p. 159.

With the final disposition of the Coffey-Hicks interference ended the struggle of Mr. Hicks to obtain his patent protection. Had it not been for the fact that, as early as August 1885 (p. 68,) he had interested the complainants, the Morgan Envelope Company, in his inventions, it is extremely doubtful if he would ever have succeeded in establishing his rights, through inability to stand the expenses of the protracted litigation.

Having shown how Mr. Hicks finally succeeded in getting all his patents, it is in order to examine said patents and ascertain what they cover and to what extent they protect the valuable inventions described in them.

Mr. Hicks' Original Application Covered the Inventions of all the Patents in Suit.

Mr. Hicks' original application for patent was filed on the 9th day of February, 1885, and covered both the combination of the Oval King Fixture and the Oval King bundle, or package of paper, and the Oval King package itself (Addition p. 42). On the 10th day of July 1885, there was carved out of such

original application a division showing, describing and claiming the bundle or package of paper alone. This division was duly allowed and became letters patent No. 325,410, dated September 1, 1885. The removal of this division left in the original case the combination appliances only. These combination appliances embodied two separate and independently patentable inventions, to wit, first, an oscillatory roll or bundle of paper combined with a *stop* for arresting the roll when the free end of the paper was pulled, so as to enable the unwound piece of paper to be torn off; and, secondly, an oscillatory roll or bundle of paper combined with a *knife or cutter*, which served as *both a stop* to arrest the roll or bundle after the free end was pulled, and also as a *means for positively cutting off* the unwound portion.

The first named and broader invention, comprehended every modification illustrated in the original Hicks application, as well that form of appliance in which the cutter for severing the unwound end served as a stop to arrest the oscillation of the roll, as shown in Figs. 1 and 2 of the Hicks patent No. 557,993 as that form shown in Fig. 6 of said patent, in which the stop is *not* a cutter; while the second and more limited invention comprehended only that form of appliance in which the cutter was a stop, thereby excluding the form shown in said Fig. 6.

There was no applicant besides Mr. Hicks before the Patent Office claiming a *cutter* for arresting an oscillating roll or bundle and at the same time acting to positively sever the unwound end of paper; so, on the 16th day of July, 1885, Mr. Hicks filed another division of his original parent case limited to such special feature of construction, which division was duly allowed and became letters patent No. 325,174, dated August 25, 1885.

In issuing this last named patent, care was taken to reserve the broader invention left standing in the original parent case, and thereby repel any change of constructive abandonment, by the insertion of the following statement :

"I do not specifically claim herein the form or construction of the oval roll, since it is made the subject matter of a separate original application filed by me on the 16th day of July, 1885.

"Neither do I claim herein, broadly, the combination with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, either with or without another stop for arresting the motion of said roll at the limit of its oscillation in the opposite direction; nor do I claim herein such a combination, wherein the roll is hung upon bearings out of line with its center of gravity, so as to automatically return it to its first position after being turned by the pull of the paper; but I have made all such matters the subject of a separate application filed February 7, 1885, of which this is a division."

The original parent case remaining in the Patent Office, after these two divisions had been carved out, was the one which was first put in interference with the application of Wheeler and the two applications of Johnson, and afterwards put in interference with Coffey. Upon the favorable termination of the last named interference it was allowed, and resulted in letters patent No. 357,993, dated February 15, 1887.

In examining these several patents and in considering the defences that have been set up against them, and in showing in what manner the defendants have infringed them, it will be most convenient to first consider the patent on the Oval King paper.

The Patent on the Paper.

Looking at the specification of this patent we find that the disadvantages attending the use of toilet paper in the form of loose sheets, and in the form of rolls of perforated paper are first dwelt upon. The object of the patentee's invention is then stated to be, to furnish toilet paper in a form that would prevent, in a large measure, the vast amount of wastage incident to the said former plans of putting up paper. Afterwards comes this statement:

"In carrying out this object I have put up one or more lengths of paper in the form of a continuous band (as contra-distinguished from a roll), of oblong or oval shape, the short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper. The band I make of a thickness calculated to produce sheets severed at the point stated of practical and economical lengths from the time the bundle is opened until it is consumed."

Next comes a reference to the drawings accompanying the specification, in which Fig. 1 is said to illustrate the mode of tearing off the sheets from the bundle; and Fig. 2, a side view of the bundle. After this, we are told a way in which the bundles can be manufactured, viz:

"I preferably form the band by winding continuous lengths of paper upon a mandrel of suitable size, with or without the interposition of the thick paper core *a* (shown in Fig. 2), and when the band has attained a sufficient thickness it is removed from the mandrel, and collapsed or flattened into the oblong or oval shape shown in both figures."

Although, up to this point, we have been told that the band of paper is made of a thickness calculated to produce sheets of "practical and economical lengths," we have not been instructed as to what the thickness of the band must be, nor as to what the patentee considered practical and economical lengths of paper. The next paragraph, however, gives us the desired information. In it the patentee says.

"I make the internal diameter of the band when in cylindrical form of not less than twice the thickness of the band at any one point and the proportions which I prefer to employ are as follows: Width of paper, from 4½ to 5 inches; internal diameter of band, when in cylindrical form, about 2¾ inches; external diameter, from 4 to 5 inches."

Now, in making the statement that the internal diameter of the band when in cylindrical form was not to be less than twice

the thickness of the band at any one point, the draftsman of the specification undoubtedly had particular reference to the structure which was before him, namely, one of the Oval King packages, such as is pictured in the patent drawing, and as was upon the market at that time.

But, realizing that the language he had employed did not give a sufficiently definite notion of the relative proportions proper to be observed in the construction of a bundle of paper embodying Mr. Hicks' invention, he added the statement as to particular proportions. The width of paper given, to wit, 4½ to 5 inches corresponded to the width of the paper then upon the market in the form of loose sheets and in the roll form (p. 128), and the internal and external diameter of the band given, namely, 2¾ inches and 4 or 5 inches, respectively, were such as to afford an internal or minimum piece or sheet of about 8¾ inches in length, and an external or maximum sheet or piece of from 12 to 15 inches in length (p. 81).

The reason why these proportions were adopted is not alleged in the patent, but a full and satisfactory explanation in regard to the matter is given by the patentee when called as a witness in this case (p. 127 *et seq.*) Said explanation may be restated as follows:

In the use of ordinary toilet paper, whether in sheet or roll form, it was and is the common practice to employ two superposed layers at one operation—for an obvious reason. Paper of the thickness that would require only one sheet or layer at a time to be used would have to have such body and stiffness as would prevent its meeting the demands and necessities of the case. Thin paper, soft and flexible, must be employed, and two layers of it are none too many. Mr. Hicks' idea was to produce a roll or band of paper of fine soft texture, whose every convolution, from inside to outside, would produce a piece of paper which, when doubled, would be of a size practicable and desirable for use. He considered that each convolution of his roll should be of a length (the width being the average width of toilet paper) that, when doubled, would cover the average hand.

Being a medium sized person himself, he took his own hand as one of average size and made a sheet of paper, which when doubled, would just cover it. He found by this experiment that the shortest piece of paper which it would be safe to use would be about 8½ inches in length, which would require that the band of paper from which he proposed to make a package, must have, when in cylindrical form, an internal diameter of about 2¾ inches. Starting then with an internal diameter of 2¾ inches, he found he could wind up layer upon layer until he had a band whose external diameter was between 4 and 5 inches, and that then, by flattening his band into oblong or oval shape, he would have a package of paper containing about the same quantity of paper as the ordinary round roll of perforated paper, or as the ordinary package of loose sheets of paper then upon the market, but without the disadvantages that arose in the manufacture, transportation and handling of said ordinary forms of toilet paper packages.

The rounded ends of his oval package afforded points at which the paper would naturally separate when the loose depending end was pulled, and upon the removal of one sheet, the end of the next sheet almost invariably dropped down automatically into position to be grasped for the next operation. Of course, in the production of a package of paper consisting of a continuous band of paper from which it was desired to withdraw one convolution at a time, affording a piece of a length desirable to use, it was necessary and inevitable that there should be a difference in the length of the inner convolution and the length of the outer convolution, and that this difference should represent a waste of material; but by constructing the band in the manner in which he did, Mr. Hicks produced a package having such a decided advantages over any other form of package in the market, that the slight amount of wastage that it involved was more than compensated for.

But to get back to the patent.

At the end of the specification occurs the following claim:

"I claim as my invention:

"A bundle of paper consisting of one or more lengths formed into a continuous band, whose internal diameter is greater than the thickness of paper, substantially as described."

What does this claim mean; to what is its language directed; what structure does it purport to describe? What is a "bundle" of paper within its purview, and what particular kind of "paper," if any, did the draftsman of the claim have in contemplation?

What is meant by the internal diameter of a continuous band of paper? Of what shape is the band? Is it square, cylindrical, elliptical, or what shape, and when you measure its internal diameter, where do you draw your line? What is meant by the expression "thickness of paper?" Is it the thickness of one of the "lengths" spoken of, or of one or both of the adjacent parts of the band, if they are adjacent? Finally, what is meant by the words "substantially as described." It would appear that the article sought to be claimed had been described some where before, but where?

These queries serve to show that, standing by itself, this claim, like the claims in most letters patent, is meaningless and unintelligible, and requires extrinsic evidence to clear up its latent ambiguities. But where are we to look for this extrinsic evidence?

Clearly, in the body of the patent itself, *i. e.*, in the specification and drawings, to which we are plainly and unmistakably directed by the index phrase "substantially described."

There can be no doubt about the soundness of this proposition. It has become one of the fundamental canons of construction in interpreting letters patent.

"Founded, as the defense is, upon an obvious misconstruction of the claims of the several patents, it does not seem to require much explanation. Omit the words 'substantially as described' or 'substantially as set forth' and the question presented would be a very different one, but inasmuch as those

words, or words of equivalent import, are employed in each of the claims, the defense is without merit. Where the claim immediately follows the description of the invention, it may be construed in connection with the explanations contained in the specification, and where it contains words referring back to the specification, it cannot be properly construed in any other way."

Seymour *vs.* Osborne, 11 Wall., 547.
The Corn Planter Patent, 23 Wall., 218.
Turrill *vs.* R. R. Co., 1 Wall., 491.
Walker on Patents, Sec. 182.
Curtis on Patents, Sec. 225.

Looking back to the specification of the patent, then, we do not encounter the slightest difficulty in arriving at the true meaning of the claim.

The words "bundle of paper consisting of one or more lengths formed into a continuous band," we find to mean "*an oblong or oval*" bundle composed of one or more lengths of "*toilet paper*" wound in the form of a continuous band, "*as contradistinguished from a roll,*" "*the short rounded ends of the bundle thus produced serving as guides for determining the proper points at which the paper is to be separated in order to produce sheets of a size desirable for use, and affording also the most advantageous surfaces upon which to tear the paper.*"

We also find the words "continuous band, whose internal diameter is greater than the thickness of paper," to refer to a continuous band of toilet paper whose "*internal diameter, when in cylindrical form,*" *is* "*not less than twice the thickness of the band at any one point,*" and that with respect to the thickness of the band it is said to be made "*of a thickness calculated to produce sheets of practical and economical lengths from the time the bundle is opened until it is consumed,*" and that what are regarded as sheets of "*practical and economical lengths*" are those that are afforded by a band which is from "4½ *to* 5 *inches*" *in width*, and whose "*internal diameter,*" when in cylindrical form, is "*about* 2¾ *inches,*" and whose "*external diameter*" is "*from* 4 *to* 5 *inches.*"

In short, we find that, read in the light of the specification, to which it expressly refers, the said claim clearly and indubitably covers, and was intended to cover, an oval bundle or package of toilet paper having all the attributes and characteristics of the bundle or package devised and worked out with so much ingenuity and care by Mr. Hicks, and put upon the market by him under the title of Oval King paper. Such a bundle or package of paper *and none other* is described in the patent.

The Oval King paper was what Mr. Hicks tried to protect by the patent, and we think he has succeeded.

As illustrating the necessity and importance of referring to the specification of a patent to ascertain the true construction to be given a claim, we will instance the celebrated case of Smith *vs.* Goodyear Dental Vulcanite Co., 93 U. S., 486.

Mr. JUSTICE STRONG, in delivering the opinion of the court, said (p. 492):

"In the specification it is declared that the invention consists in 'forming the plate to which the teeth or teeth and gums are attached of hard rubber or vulcanite, so called, an elastic material, possessing and retaining in use sufficient regidity for the purpose of mastication, and at the same time being pliable enough to yield a little to the motions of the mouth.' This is immediately followed by a description of the manner of the proposed use; that is, of making the hard rubber plates, and the claim, as stated, is '*the plate of hard rubber or vulcanite or its gums substantially as described;*" that is, plainly formed as described. The invention, then, is a product or manufacture made in a defined manner. It is not a product alone separated from the process by which it is created. The claim refers in terms to the antecedent description, without which it cannot be understood. The process detailed is thereby made as much a part of the invention as are the materials of which the product is composed. We shall not quote at large the description of the mode of making the plate. Such a quotation would unnecessarily prolong this opinion. It plainly shows a purpose of the inventor to secure what had not been secured before, a combination of a plate with artificial teeth or with gums and teeth in such a manner as to be free from the objections and defects or inconveniences attending the method before practiced of attaching such teeth to a metallic plate fitted to the roof of the mouth. Some of these objections are stated;

such as expense, hurting the mouth, impeding mastication, and obstruction to perfect articulation. In carrying out the purpose proposed, the materials employed were all old. The teeth, the wax, the plaster, the molds, the soft rubber and the hard rubber were none of them new. It is also true that the steps in the process were not all new. Plaster had been used for formation of molds. The process of forming a plate by the use of such molds was well known, and so was the process of converting a vulcanizable compound into vulcanite by heating it and allowing it to cool in molds. But the process of Dr. Cummings extended beyond the use of known materials and the employment of the processes mentioned. It was vulcanizing soft rubber in a mold, and in contact with artificial teeth inserted in place into it while it remained in a soft condition. It was well described by the circuit judge as 'the making of a vulcanite dental plate out of a vulcanizable compound, into which the teeth were embedded in its plastic condition, and the rubber compound, with the teeth thus embedded in it, afterwards vulcanized by heat, so that the teeth, gums and plate should be perfectly joined without any intervening crevices, and the plate should possess the quality of hard rubber or vulcanite.' The combination thus resulted in a manufacture which was 'one piece.' *If, then, the claim be read, as it should be, in connection with the preceding part of the specification, and construed in the light of the explanation which that gives,* the invention claimed and patented is *'a set of artificial teeth as a new article of manufacture, consisting of a plate of hard rubber with teeth or teeth and gums secured thereto in the manner described in the specification by embedding the teeth and pins in a vulcanizable compound, so that it shall surround them while it is in a soft state before it is vulcanized, and so that whea it has been vulcanized the teeth are firmly and inseparably secured in the vulcanite, and a tight joint is effected between them, the whole constituting but one piece'.*"

We have italicised the claim as it read in the patent and the construction put upon it by the Court.

Another very instructive case is that of Lawther *vs.* Hamilton, 124 U. S., 1. The patent sued upon was No. 168,164, granted to Lawther, September 28, 1875, for an Improvement in the Treatment of Oleaginous Seeds, and its claim was as follows:

"The process of crushing oleaginous seeds and extracting the oil therefrom, consisting of the following successive steps, viz, the crushing of the seeds under pressure the moistening of the seeds by direct subjection to steam and finally the expression of the oil from the seed by suitable pressure, as and for the purpose set forth."

It was proven that prior to Lawther's invention seed had been crushed by rolls and muller stones, and that heat and moisture had been applied to the seed (1) before crushing; (2) during crushing, and (3) after crushing; but the claim of the patent was sustained and infringement found, upon the theory that the invention of the patentee consisted in omitting the muller stones in the crushing operation and in first subjecting the seed to the action of crushing rolls alone, then steaming, and finally pressing *as desribed in the specification*.

Mr. JUSTICE BRADLEY, speaking for the Court, said:

"But while we are satisfied that the invention is that of a process, *it is nevertheless limited by the clear terms of the specification*, at least so far as the crushing of the seed is concerned, to the use of the kind of instrumentality described, namely, in the first part of the process, to the use of powerful revolving rollers for crushing the seed between them under pressure. *The claim cannot have the broad generality which its terms, taken literally, might, at first sight, seem to imply*; but, *limited as suggested*, it seems to us sustainable in law."

The point to be observed in this case is, that the first step in the Lawther process, and the one which gave vitality to the invention, *as described by the language of the claim*, to wit, "the crushing of the seeds under pressure," was anticipated by the old process involving the use of rolls and muller stones, for by them the seeds were "crushed under presure," and it was only by a departure from the literal meaning of the words of the claim and their subordination to the description contained in the specification that the claim was found sustainable.

Cases innumerable might be quoted in further illustration of the rule under discussion, but the above are deemed to be apt

and sufficient. We will only add, that a careful examination of the subject has developed the interesting fact that most all of the important cases that have come before the Supreme Court of the United States for review, in which the patents have been sustained, the claims of the patent have been interpreted by the specification and been saved and upheld by reason of the limitations and qualifications which such specification has impossed upon them.

Rubber Co. *vs.* Goodyear, 9 Wall., 788.
Klein *vs.* Russell, 19 Wall., 433.
Goodyear Dental Vul. Co. *vs.* Davis, 102 U. S., 222.
Consolidated Safety Valve Co. *vs.* Crosby Steam Gauge and Valve Co., 113 U. S., 157.
The Driven Well Cases, 122 U. S., 40.
New Process Fermentation Co. *vs.* Maus, 122 U. S., 413.
The Telephone Cases, 126 U. S., 1.

Assuming then that the thing covered by the claim of patent No. 325,410 is the Oval King bundle or package of paper, the question arises, did such package constitute a patentable subject?

The statute provides—

"Sec. 4886. Any person who has invented or discovered any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement thereof, not known or used by others in this country, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, and not in public use or on sale for more than two years prior to his application, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceedings had, obtain a patent therefor."

Undoubtedly the Oval King package should be classified under the statute as a "manufacture."

It was, therefore, a patentable subject, provided it required invention to produce it, that it was new and useful, and was not subject to any of the disabilities enumerated in the statute.

Was the Oval King Package a New and Useful Invention Under the Law?

That the said package required the exercise of inventive talent in its production, and that it was sufficiently new and useful to support a patent we think is evidenced—

First, by the amount of time, thought and careful study Mr. Hicks is shown to have bestowed upon it, and by the many experiments he made and failures he experienced, before he achieved ultimate success. The idea did not come like a brilliant flash, as is the case with some inventions, but was gradually and patiently evolved during a course of practical experimentation relative to the subject.

A reading of Mr. Hicks' deposition is satisfying on this point (p. 126, *et seq.*)

Secondly, by the favor with which the package was received when first put upon the market (p. 130).

Thirdly, by the effort which the defendants, who are probably the oldest and largest manufacturers of toilet paper in the country, if not in the world, made through their agent, Mr. Morton, to secure control of the paper as soon as the paper was brought to their attention.

Fourthly, by the fact that the defendant, Seth Wheeler, as soon as he got hold of a package of the paper sent it to England and had it patented there in his own name, setting out the novelty and utility of the package in his application for patent in the following language, viz :

"The paper is used with the apparatus in the form of an approximately flat or oval coil roll or bundle, which must be large enough to receive within it the plate *e* as shown in figures 2 and 3."

"In both of the forms or modifications above described the pieces of paper torn off are of the same length as the circumference of the bundle at the time of tearing them off, and they will vary only slightly in length as the circumference of the bundle diminishes with the consumption of the paper.

"By thus regulating the length of the pieces of paper the waste of paper which takes place when it is drawn from a roll in the ordinary manner is avoided."

Fifthly, by the fact that the defendant, Wheeler, since the advent of the Hicks invention, has taken four separate patents in this country, to wit, No. 341,709, dated May 11, 1886; No. 371,290, dated October 11, 1887; No. 396,675, dated January 22, 1889, and No. 401,233, dated April 9, 1889, covering different fixtures and appliances for supporting similar oval packages of toilet paper so that one and only one convolution of paper could be removed from the package at a time, *and has not, during that time, patented a single fixture in which any different style of package or any different mode of consuming the paper is shown or described.*

Sixthly, by the fact that since the Hicks invention the usual number of "original and first inventors" of the oval package have sprung up and been cut down.

Seventhly, by the extent of the manufacture and sale of the packages by appellants, 3,572 cases of 100 packages each or 357,200 packages containing 126,020,000 feet or over 23,000 miles of toilet paper having been made and sold by them during a single year (1888) and the demand for the paper increasing (p. 137.)

Eighthly, by the extent of the manufacture and sale of the packages by the defendants, which is estimated by those conversant with the state of the trade to be equal to that of the complainants (pp. 70, 76, 78).

Ninthly, by the fact of the general adoption of the paper for use in public places, such as the great Executive Departments of the Government at Washington and many of the largest hotels and manufacturing establishments in the country (pp. 70, 74, 76).

Tenthly, by the fact that the package has largely displaced and superseded toilet paper put up in the old forms. (pp. 70, 72, 131).

Lastly, by the fact of the grant of the patent itself by the skilled officers of the Patent Office.

Such facts as the foregoing have always been regarded by the courts as tending strongly to establish a sufficiency of invention and the novelty and utility requisite to support a patent, as the following citations will show:

"The utility of the change as ascertained by its consequences is the real practical test of the sufficiency of an invention, and since the one can not exist witout the other, the existence of the one may be presumed on proof of the existence of the other.

"Where the utility is proved to exist in any degree a sufficiency of invention to support the patent must be presumed.

"We do not say the single fact that a device has gone into general use and has displaced other devices which have previously been employed for analogous uses establishes, in all cases, a patentable invention. It may, however, always be considered, and when other facts in the case leave the question in doubt it sufficient to turn the scale."

Webster on Patents, page 30.
Smith *vs.* Goodyear Dental Vulcanite Co., 93 U. S , 386.
Krementz *vs.* Cottle 148 U. S , 556.

"The fact of the grant of the patent after a careful investigation by the Patent Office Examiners, raises a strong presumption of novelty and patentability."

Smith *vs.* Goodyear, 93 U. S., 486.
Lehubenter *vs.* Holtham, 105 U. S., 96.

The grant of letters patent is *prima facie* evidence that the patentee was the first inventor of the device described in the letters patent and of its novelty.

Cantrell *vs.* Wallick, 117 U. S., 689.

The Defendants' Infringing Oval Package.

On this point there is little to be said. The Oval package made and sold by the defendants (Complainant's Exhibit, Dfts. Roll A) is as nearly like the package made under the patent by appellants, as a cheaper and less carefully formed package could possibly be.

There is no question about its construction and proportions falling within the patent. It is oval in shape, has a paper core, is five inches wide, its inner convolution affords a sheet 8⅞ inches in length and its outer convolution a sheet 13⅜ inches in length.

Mr. Wheeler swears it is made to fit the Oval King Fixture of the appellants, and that it is sold by the defendants for use upon said fixtures (p. 50, *et seq.*); that when customers order "Oval King" paper, the defendants supply their paper as answering that designation (p. 51). Not only that. The proof is that the defendants' paper is sold and billed as "Oval King Paper" (pp. 21, 76) and "Albany Oval King" (p. 78).

There do exist the following differences between complainant's and defendants' package, however, which should not be overlooked, viz: defendants' package is formed of a stiffer, cheaper, grade of paper; weighs less by two ounces (p. 76); contains a shorter length of paper (p. 75); is wound looser and less carefully, so as to look larger, and is sold from one to several dollars per case cheaper than appellant's package (pp. 70, 73, 77) as the exigencies require.

A more deliberate, wanton and exasperating case of infringement can hardly be imagined.

The Wheeler "Pocket Companion" Defense.

What are known in this case as the Wheeler "Pocket Companions" are small packages of toilet paper, each having an internal diameter, when in cylindrical form, of one and one-eighth inches, and an external diameter of one and one-half inches. Some of them are composed of unperforated paper and some of perforated paper. Each one represents the first few innermost convolutions of the ordinary round roll of paper, such as was on the market at the date of Mr. Hicks' invention, nothing more, nothing less, and it can be produced either by stopping the one and one-eighth inch winding mandrel of the ordinary round roll winding machine, after a few convolutions only have been wound upon it, and then taking the wound portion off, or by *unwinding* an ordinary round roll till only a few of the small inner convolutions remain; the little bundle thus afforded being then collapsed or flattened in order that it may occupy the minimum amount of space when placed in the pocket.

In the production of those little bundles, the design was simply to provide a small amount of toilet paper that could conveniently be carried in the pocket. No attention was paid to the relation of the inner to the outer convolutions; there was no piece-measuring quality designedly imparted to any of the convolutions, and no intention that when one convolution was torn off the end of the next one would drop down into position to be grasped for the next operation. The oval form itself was not intentionally imparted, but was merely accidental and incidental, and the result of trying to make the bundle as flat as possible.

Mr. Wheeler, it appears, never discovered any particular merit in those little bundles of paper till after the Hicks invention; and although he announces with some pride that he was the very first person to take out a patent in this particular line of invention, the father of the art, and had to his credit some

twenty-five patents and applications, he never applied for a patent on his little bundle, nor thought of doing so, and never attempted to devise a fixture with which said paper bundle could be made to co-operate (p. 189); yet when he got first sight of Mr. Hicks' package, he immediately hurried it off to Europe and had it patented there, and from that day to this has been at work upon fixtures and appliances for co-operation with the Hicks' package *and none other*, as his four patents, hereinbefore referred to, bear testimony.

The conclusion is irresistible, that Mr. Wheeler did not, till this litigation, regard his "pocket companion" and the Hicks package as the same thing.

But, it is contended, that, having made the small oval bundle, it was simply a question of degree or enlargement to make the Oval King package; in other words, the step from the small to the large bundle was obvious and required no invention.

This argument is very catchy, but specious. If the Oval King package, developed as it was by the exercise of thought, skill and ingenuity for the accomplishment of a fixed, definite result, had been invented first and first put upon the market, any one seeing it without knowing it to have been constructed on any intelligent plan and without understanding its intended mode of use, but viewing it simply as an oval bolt of paper might well have said to himself, "I will wind up a little bundle of paper in that form to carry in my pocket," and then immediately proceed to wind on his two fingers as much paper as he thought would be derirable to carry in his pockt, without exercising any ingenuity or inventive talent whatever. It would be a mere mechanical copying on a smaller scale, and would require mere mechanical skill and that only, and the resulting article would not be patentable. But where the small bundle of paper, like the Wheeler pocket companion, was first to exist, and the problem presented was how to make a package that would have the form of a wound roll or band, and afford to the user sheets of approximately the same length, without the neces-

sity of subjecting the web or roll to any perforating or other like difficult and expensive weakening process, and of which one convolution only should be the measure of the size of the sheet, and each of the convolutions, from first to last, should afford a sheet of a size, when doubled, practicable and desirable for use. We say, when this was the problem presented, it took something more than the mere contemplation of such small bundle or "pocket companion" and the exercise of mere mechanical skill, mere hands, to accomplish the desired result. It required brain and the exercise of it; in a word, it required *invention*.

If a person had seen one of the pocket companions and had wanted a package containing more paper he would have done just as Mr. Wheeler did, *take the small package and wind more paper upon it till he got enough*. That would be increasing the size of the bundle *according to the plan on which it was originally built*, not striking out on a new plan not contemplated by the original projector, and would result in the ordinary round paper roll of commerce, with which the small pocket bundle illustrates a difference *merely of degree* which is the difference contemplated by the defendant—and not a difference of *kind*, which is the true difference that exists between the Oval King and the pocket package.

We submit that, putting ourselves in the place occupied by Mr. Hicks at the date of his invention and granting he had full knowledge of the Pocket Companion, the advance which he made from the Pocket Companion to the Oval King package *was not by any means obvious*, but exhibited all the essential characteristics of invention.

This, we believe disposes of the Pocket Companion defense.

The Peacock Patent Defense.

The next defense is patent No. 273,594, granted to J. F. Peacock, March 6, 1883, for Toilet Paper Packet Case.

The paper bundle shown in this patent, while of oval form, is, like Mr. Wheeler's pocket companion, intended to be car-

ried in the pocket, and within a metal enclosing case at that, which would preclude its having the described attributes and capabilities of the Hicks package.

All the objections urged against the Pocket Companion apply with equal, if not greater, force to this patent, and the following may be added :

"1. The paper is applied to the core of the case and *is used while thereupon.*

"2. The oval or elliptical form is given the core and paper, not for the purpose of affording points at which the paper may be most conveniently torn, but 'so that either the edges or the sides may be used, as desired or most fitting to the parts.'

"3. The convolutions of paper are glued together at the edges or otherwise held together, which, of course, prevents the falling action of the end of the new sheet after one sheet has been torn off, as dwelt upon in the Hicks patent."

It is not stated in the patent how or where the convolutions are to be torn off or how many at a time, but, considering the mode in which the paper is stated to be used, the draftsman of the patent, realizing the difficulty of his position, may have been justified in the simple statement that "then the soiled portion may be removed by tearing it from the rest of the roll," instead of attempting a more elaborate explanation.

The claims of the patent relate entirely to the "two-part case," which serves as a handle while using the paper and as a means for enclosing the same before placing it in the pocket.

This case was a wise provision and evidenced thought. It doubtless saved the patentee's application from being rejected for want of utility in the invention.

It is needless to say there is no proof that the invention ever went into use.

As the certified copy of the Hicks application shows, the Peacock patent was fully considered by the Patent Office officials and the Hicks patent granted notwithstanding it.

As a defense this Peacock must fail.

The Alleged Prior Invention of Robert J. Coffey.

This defense requires but little comment.

To concede that the Oval King package is what it is claimed in the patent to be, namely, an improvement upon the old-fashioned roll of perforated paper (and defendant Wheeler himself admits that it is an improvement, p. 194), is to dispose entirely of the pretensions put forth in respect to Coffey, for the latter used such old fashioned roll, and nothing else.

His story is, that in 1884, when he was running a hotel called the Windsor House, at Windsor, Vermont, there was sent him, for use in the closets of such hotel, a supply of the ordinary rolls of perforated paper made by the defendants, The Albany Perforated Wrapping Paper Company; that, in taking such rolls from the box in which they came packed, he discovered that some of them had been flattened by the pressure of the lid, and that he found when he mounted one of these flattened rolls in the ordinary fixture, and attempted to draw paper from it, that, instead of rotating freely upon the spindle, so as to enable the operator to reel off long strips at a time, as ordinarily, it would only turn sufficiently to enable one or two sheets to be detached at a time, and thus effect a saving of paper. After he had used up the rolls that came already flattened, he proceeded to flatten others by standing upon them, or otherwise, before mounting them in the fixtures.

Now, this Mr. Coffey is the person whom Mr. Thompson, of the firm of Moore, Arms & Thompson, procured to file an application for patent in order to arrest the issuance of the Hicks patent, after said Thompson had himself failed to secure control of the Hicks invention, as hereinbefore detailed, and he is likewise the person whom all the tribunals of the Patent Office found to have been but a mere *experimenter* and as not having a case that could disturb the title of Mr. Hicks; yet, notwithstanding all this, and disregarding for the moment all doubts that may arise in the mind as to truth of his story, we

find that *all he claims to have done* was to use, *without rewinding and without alteration of proportions or dimensions,* the *old form of roll,* such as had been made and sold by the defendants since the issuance of the Wheeler patent in 1871, and which it was the prime object of Mr. Hicks' invention to improve upon (p. 232).

Such old-fashioned roll has an internal diameter of only 1⅛ inches and an external diameter of 3½ inches (p. 24), and not only is the tearing point on it constantly shifting, according to the varying position of the successive lines of perforation, but if the natural lines of separation, *i. e.*, the said lines of perforation are entirely disregarded and an attempt is made to remove one complete convolution at a time, as in the case of the Oval King package, at least two-thirds of the roll will have to be rejected as not competent to produce convolutions or sheets of a length desirable for use (p. 84.)

Particular attention is called to the depositions of Mr. Hicks (p. 146), Mr. Day (p. 148), and of Mr. C. C. Johnson (p. 142), as constituting a complete answer to the pretentions put forth by Coffey. From the deposition of Mr. Johnson it appears extremely doubtful if Mr. Coffey's operations with the rolls of perforated paper antedated the invention of Mr. Hicks of the Oval King package (p. 144).

Attention is directed to the discrepancies between the depositions given in the interference case, and the depositions of the same witnesses taken in this case and to the absence of all *original* exhibits.

The Coffey defense, therefore, fails both as to identity of subject-matter and as to priority.

The Alleged Prior Invention of Henry B. Richardson.

After the issuance to Mr. Hicks of the Oval King package patent and of the first Oval King fixture patent, to wit, on or about September 15, 1885, one Henry B. Richardson, of Amherst, Mass., filed an application for a patent on a bundle of

toilet paper *having coincident cuts extending through all of its convolutions*, said cuts being designed to weaken the paper at said point and thus enable the sheets to be torn off with greater facility.

This application was put into interference with a pending application of Mr. Hicks for a similar improved package, filed July 17, 1885, (not hereinbefore referred to), and also with an application of the ubiquitous Charles C. Johnson, for an alleged similar package.

The issue in said interference, Richardson *vs.* Hicks *vs.* Johnson, was as follows :

A bundle of toilet paper, consisting of a web or strip wound upon itself, and having a line of coincident cuts extending transversely across the web and reaching through all the thickness of paper.

This issue, it will be observed, *was not limited to an oval form of bundle*, but was broad enough in its terms to cover the application of coincident cuts to *any* bundle of paper, *irrespective of its form or other peculiarity of construction*.

The application of Johnson did not show a bundle having transverse coincident cuts reaching through all the thicknessses of paper, as called for by the issue, but only a bundle composed of a web slitted traversely at regular intervals, and then wound into a roll or bundle *in such manner as that the slits did not coincide or register at all.*

Perceiving this discrepancy in the Johnson bundle, Hicks moved for a dissolution of the interference, as to Johnson, on the ground that what Johnson showed did not fall within the issue, and, moreover, did not exhibit any invention in view of the common practice of winding a traversely *perforated* web into roll form, as shown in the old patent to Wheeler, and, also, in view of the equally common practice of slitting, instead of perforating, superposed layers of paper to enable the several layers to be successively torn off with facility on the line of slits, as illustrated by the reissued patent of Edwards, No.

7,815, dated July 24, 1877. This motion of Hicks to dissolve was granted by the Examiner having the case in charge, and, upon an appeal being taken to the Board of Examiners in Chief, the Examiner's decision was affirmed. A copy of the Board's decision is in the record (Addition to Record, p. 72).

Having thus disposed of Mr. Johnson, the attorney of Mr. Richardson was next approached with a view to settling the differences between Mr. Richardson and Mr. Hicks without litigation, and Mr. Richardson was found willing to accept $50 for an assignment to complainants of all his right, title and interest in his application and alleged invention (p. 215). That the price paid was more than Mr. Richardson's claims and pretensions were worth, will plainly appear from a reading of his deposition offered in this case, and upon which the defense now being considered is solely based.

In his said deposition, Mr. Richardson alleges that, somewhere about January, 1884, he wound, on a board, *two rolls* of paper each of which he says was similar to that shown in the drawing filed with his application for patent (*Ibid.*), that he tested said two rolls on a fixture which he alleges was similar to that shown in his said application for patent, and the result was satisfactory; that this test was made in the bath-room of his private house; that he cannot recall how long said fixture and rolls remained in his said bath-room (p. 213); that they were seen only by the members of his own family (p. 213); that the fixture was taken down and the pieces of it, after knocking around the house for some time, finally became lost (*Ibid.*); that one day, prior to his application for patent, he went to the office of Mr. Chapin, a patent solicitor of Springfield, Mass., to consult with him about some motor patents in which he was interested *and there saw an oval package of paper* (being doubtless the Hicks Oval King package then being manufactured by complainants in the same city) *which recalled* what he had previously done in the same direction, and he *then* concluded to apply for a patent on his old appliances (pp. 214–215); that Mr. Chapin prepared an application for

him which was subsequently filed and put into interference with the application of Mr. Hicks (p.); that, at the time of his application for patent, he could produce neither of the rolls he had made nor any part of his fixture but he took Mr. Chapin the board he had used to wind the paper upon (pp. 213–214).

It would probably be difficult to make out a clearer case of abandoned experiment than this, and further discussion of the defense would be unprofitable.

The Oval King Fixture Patents.

We come, now, to a consideration of the two other patents in suit, viz., No. 325,174, dated August 25, 1885, and No. 357,993, dated February 15, 1887.

Both these patents, as hereinbefore explained, were derived from th same original application, and cover and were drawn to cover the appliance which results from the combination of what is known as the "Oval King Fixture" (complainant's Exhibit C), with the Oval King roll or package of paper forming the subject matter of patent No. 325,410, here in suit.

The claims of said patents are as follows:

No. 325,174.

1. The combination with a weighted oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a knife or cutter co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction and a stop for limiting the motion of said roll, substantially as described.

2. The combination with an oscillatory roll of toilet paper having its bearings out of line with its center of gravity and actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter for co-operating with said roll to sever the unwound portion when the roll has reached the limit of its motion in one direction, the eccentric hanging of the roll returning it automatically to its normal position, substantially as described.

3. The combination with an elongated or oval oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop constituting a knife or cutter co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated, substantially as described.

4. The combination with the supporting arms of a stop plate or cutter extending between said arms, and an oscillating core plate having its bearings in said arms and adapted to hold a roll of paper, substantially as described.

5. The combination of the back plate, the supporting arms, the plate forming the stop and cutter and the oscillating core plate, the whole arranged and operating, substantially as described.

No. 357,993.

1. The combination with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described.

2. The combination with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

3. The combination with an oscillating roll of toilet paper, having its bearings out of line with its center of gravity, and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed, the roll will automatically resume its normal position, substantially as described.

4. The combination with an oscillating roll of toilet paper, of a cutter co-operating to sever the unwound portion when the roll has reached the limit of its movement in one direction, and means, substantially as described, for automatically bringing the roll back to normal position, as seth forth.

5. The combination with the supporting arms, of an oscillating core plate weighted on one side of its pivots, so as to cause the roll supported by it to automatically resume its normal position after being oscillated and a stop for limiting the motion of said plate, substantially as described.

The principal difference between the two patents is that while the first one, No. 325,174, is limited to an appliance in which

a knife or cutter for arresting the roll of paper when oscillated, is employed, the later one, No. 357,993, is broad enough in its scope to include a structure in which a *mere stop which has no cutting action at all* is employed to arrest the roll, such a stop, for instance, as is illustrated, in Figure 6, of said patent No. 357,993.

Upon carefully examining the claims of these two patents, it will be found that in all of them, except the 4th and 5th of No. 325,174, and the 5th of No. 357,993, the paper roll is included, not merely by implication, nor incidentally, by a recitation of function of some other part, but as a *positive active element* of the combination and a *controlling* one at that.

Take the 3d claim of No. 325,174, for instance, which reads:

> 3d. The combination with an elongated or oval oscillating roll of toilet paper actuated in one direction by a pull upon its free end of a stop constituting a knife or cutter co-operating with the roll to sever the unwound portion therefrom when the roll has reached the limit of its motion when so actuated, substantially as described.

Here the roll is absolutely depended upon to give the claim vitality. Without it the claim would cover only a knife or cutter and would not be patentable; but combined with and arranged for co-operation with the knife, a new organization is effected and a new result is attained. A substitute for the knife might be devised, such as a simple stop having no cutting action whatever, as shown, for example, in figure 6 of patent No. 357,993, and claimed in the first claim of said patent, and still an operative combination would remain and the paper would be removed one convolution at a time, as before, in the operation of the appliance; *but take away the roll and the combination is at an end.* No substitute for the roll is possible. It is the very *gist* of the combination, and, in fact, the life of the whole invention.

You may dispense with the core plate and provide journals on the ends of the roll in their stead; you may separate the supporting arms from the back plate: you may dispense with

the back plate entirely ; you may remove the knife and employ the stops ; *but the roll of paper cannot* be dispensed with for a moment and leave an operative combination, in any of the claims in which it is embodied as an element.

We dwell thus upon this point in order that the court may clearly see that these patents cover, in point of fact, not merely the metal parts constituting the frame or skeleton of the invention, but primarily and essentially the *combination of the vitalizing paper roll with said skeleton parts*, to form the new and useful appliance described at large in the specifications.

Besides being in law indispensable to the validity of the claims of these patents, the paper roll is the chief and, oftentimes, the only element of profit growing out of the sale of the patented appliance.

Appreciating, therefore, the fact that if they should sell the metal parts of the appliance alone, without the paper rolls ; in other words, if they should sell a *part only* of the patented combination, it might be claimed that they had impliedly given each purchaser the right to supply the absent element, *i. e.*, the paper roll, the appellants have from the first made it an invariable rule to *never sell fixtures without a co operating roll or rolls ;* in other words, to *never sell less than the whole of the patented combination*, unless it was the roll alone, which was protected by an independent patent (Morgan, p. 71 ; Day, p. 137).

More than this, appellants have taken the precaution to mark upon every roll sold by them the date of the roll patent as well as the date of the patents covering the combined roll and fixtures, that each purchaser might know, *first*, that the roll was a patented article and could only be procured from appellants ; and, *secondly*, that the improved appliance, consisting of the combination of the roll with the fixture, was also protected by appellants' patents, and could only be procured in whole or in part from them.

Certainly, no precaution was omitted to warn purchasers and users of the appellants' rights.

Infringement of the Combination Patents.

The appellees are charged, in respect of both combination patents, with the following acts of infringement, viz:

1. *Selling oval rolls of paper of their own manufacture* with *Oval King fixtures* once sold by appellants in combination with appellan s' Oval King paper, to persons other than appellees; the fixtures having been obtained by appellees from the said original purchasers of the patented combination.

2. *Selling oval rolls of paper of appellees' own manufacture* to persons who had previously purchased combined Oval King fixtures and Oval King paper from appellants, with the *knowledge and intention* that said appellees' paper so sold was to be used in connection with the said appellant's fixtures *to form the patented combination.*

I.

Infringement of the first kind is shown by the following extracts from the evidence:

Elisha Morgan, the president of the Morgan Envelope Company, testifies as follows (p. 71).

"Q. 18. What has been the practice of your company in respect to the disposition of Oval King fixtures independently of Oval King paper?

"A. We do not sell the Oval King fixtures independently of the Oval Roll paper, and only to such parties as deal in or use our paper and only do sell them to such parties. We also restrict them as to quantity, that dealers shall purchase a given quantity of paper to a given number of fixtures to be sold in connection with the paper only.

"Q. 19. What, if any, instructions have you given your agents and salesmen on this point?

"A. Generally, to sell not more than one fixture to one case of paper; and to dealers we have required that they shall observe the same rule, excepting in cases where they supply a hotel or public building with fixtures, with the understanding that the paper for such fixtures shall be purchased from them, and that their supplies shall be purchased from our company.

"Q. 20. Have you ever sold Oval King fixtures to the Albany Perforated Wrapping Paper Company or to W. J. Morton, of Boston?

"A. We have not.

* * * * * * *

"Q. 22. Have you refused to sell Oval King fixtures to parties desiring them in quantities?

"A. We have."

Robert W. Day, treasurer of the Morgan Envelope Company, testifies as follows (p. 137):

"Q. 3. Seth Wheeler, a witness produced in behalf of the defendants, has testified that the Oval King fixtures, like complainant's Exhibit C, sold or used by him, or by the Albany Perforated Wrapping Paper Company, were bought from the Hudson Valley Paper Company, of Albany, N. Y., which company was understood to be the Albany agent of the complainant, the Morgan Envelope Company. Will you please state whether or not the said Hudson Valley Company is or has ever been the agent of the Morgan Envelope Company for the sale of such fixtures or paper, or for any purpose whatever?

"A. They are not and never have been.

"Q. 6. What has been and is now the practice of the company, I mean the Morgan Envelope Company, in regard to the disposition of Oval King fixtures?

"A. To sell them only with the paper.

"Q. 7. Has the Morgan Envelope Company sold any Oval King fixtures to the Hudson Valley Paper Company, of Albany, N. Y., without paper?

"A. We may have sent them fixtures and we did not send them paper, but they purchased from time to time the paper from us, and understand that we do not supply fixtures unless they also order our paper.

"Q. 8. Has or has not your company ever refused to sell fixtures without paper, where fixtures only were ordered?

"A. We have.

"Q. 9. State what your practice has been in this regard and whether such practice has been invariable?

"A. To inform our customers that we could not supply fixtures unless paper was also ordered and this has been our invariable custom."

Seth Wheeler, president of the Albany Perforated Wrapping Paper Company, the defendant corporation, testifies as follows (p. 183):

"Q. 54. From whom did you buy the Oval King fixtures, like complainant's Exhibit C Fixture, which you have sold or used, or which the Albany Perforated Wrapping Paper Company sold or used?

"A. From the Hudson Valley Paper Company, of Albany, N. Y."

Again (p. 196):

"X-Q. 155. Have all the fixtures, like complainant's fixture C (the Oval King fixture), which you have sold or used, been procured by you or your company, directly or indirectly, from the Hudson Valley Paper Company?

"A. I think not.

"X-Q. 156. From what other source or sources have fixtures been procured?

"A. I think all those we have had at Albany were procured from the Hudson Valley Paper Company. I think Mr. Smith, our New Nork agent, procured some of them here (New York). How many I do not know, or of whom he obtained them."

Again (p. 50):

"Int. 168. Am I to understand from your testimony that you have never sold nor given away with paper manufactured by you in the form of Exhibit A, any Oval King fixture or fixtures like the Oval King?

"A. We have sold them, but we have never given any away, that I remember; I refer by them to Oval King fixtures."

From the portions of the testimony quoted it appears, that it was the invariable rule for the Morgan Envelope Company to furnish fixtures only to those who also procured paper from it; that it was the understanding had with all purchasers that the fixtures were only to be used in connection with paper furnished by said company; and it does not appear that the fixtures procured by defendants from the Hudson Valley Paper Company and from Smith, the defendant's New York agent, represented any exception to the rule.

II.

Infringement of the second kind is shown by the following extracts in addition to the above quoted testimony.

SETH WHEELER testifies as follows (p. 49):

"Int. 146. When did you first begin the manufacture of paper like Exhibit A, I mean bundles or rolls of the form and dimensions of Exhibit A?

"A. 1885, I think.

"Int. 147. What time in 1885?

"A. In the early part of the year.

"Int. 148. After you had obtained knowledge of the Oval King fixture and roll?

"A. After a sample was sent me.

* * * * * * *

"Int. 151. How do the dimensions of rolls like Exhibit A compare with the dimensions of the rolls manufactured for the Oval King fixture?

"A. Well, they are the same. I suppose.

"Int. 152. Your Company then made these rolls in the form of Exhibit A in such form and proportions as that they could be used upon the Oval King fixture, did it not?

"A. It did.

"Int. 153. After the Oval King fixture was put upon the market there began to be a demand for paper to be used with it, did there not?

"A. There did.

"Int. 154. And your Company proceeded to take part in supplying that demand by the manufacture of rolls like Exhibit A, did it not?

"A. It did.

"Int. 155. And did make and sell large quantities of rolls of paper put up in that form and for that purpose, did it not?

"A. We sold all we could.

"Int. 156. Have your dealings in that kind of paper been extensive?

"A. Not as compared with our other business.

"Int. 157. To what parts have you shipped the greatest quantities of paper like Exhibit A?

"A. Boston and Chicago.

* * * * * * *

"Int. 163. You know of no other fixture, beside fixtures such as the Oval King with which paper of the size and dimensions

of Exhibit A, is especially adapted to co-operate, do you?

"A. I do not, except the fixture made in Holland.

* * * * * * *

"Int. 165. This Holland Fixture has not been used to any extent in this country, has it?

"A. The one I have is the only one I ever saw in this country.

* * * * * * *

"Int. 177. By what name has paper of your manufacture like Exhibit A been called by you?

"A. Oval roll.

* * * * * * *

"Int. 179. Where parties would order Oval King paper or paper for the Oval King fixture, you would furnish paper like Exhibit A, would you not?

"A. Yes."

From this testimony it appears that the appellees have made and sold oval rolls of paper adapted to fit and intended to fit the Oval King fixtures made and sold by appellant, with the intent that the purchaser of said oval rolls should, and with the assurance that they would, combine said oval rolls with the Oval King fixtures in the manner and for the purposes set forth and claimed in appellant's two combination patents, thereby depriving appellant of the most valuable right secured it by the patents, namely, the exclusive right to re-supply the most important element of the patented combination after that element had been destroyed, as it was understood and intended it should be, by the purchaser in the use of the original combination, thus, in effect, depriving appellant of that exclusive right *to make* the patented combination secured to it, in terms, by the patent.

These several acts complained of, the appellees admit, but say it is a case of *damnum absque injuria*.

The Law of "Repair" and "Reconstruction."

The Statute (Sec. 4,884) accords to a patentee or owner of a patent the *exclusive* right to make, use and vend the patented invention for a term of seventeen years from the date of the patent.

As we have seen, the patented invention covered by the two combination patents is *a combination of elemental parts* of which *the oval roll of paper is the most important and essential.*

This combination as a whole appellant, as the owner of the patents, had the exclusive right, in the first instance, to make, use and sell. It exercised its right *to make* and it sold the combination, in its entirety, to a purchaser for value. By that sale, the property in that particular embodiment of the patented combination became vested, absolutely, in the purchaser, who, as incidental to his ownership, had the right to use it as it was designed and intended to be used *until it became worn out or destroyed*, and also had the right to make such *repairs* to it as would *tend to preserve its identity* and enable it to be used in the manner and for the purpose it was contemplated it should be used.

While it is settled law that a purchaser has this right *to repair* a patented machine bought by him, it is equally well settled that he is not permitted to exercise the right of *reconstruction.*

What is repair? What is reconstruction?

If we can answer these questions satisfactorily, we shall be able to tell under which category the appellees' operations fall and determine their liability.

When it is said that a purchaser has a right to *repair* a patented machine he has bought, it is meant that he has the right to *mend* a part that has become accidentally broken, or to *refit* or *readjust* a part that has become so *worn in the ordinary use of the machine* as to render the machine, as a whole, inoperative and ineffectual for the purpose for which it was purchased.

To illustrate, let us suppose that a man buys a patented lawn mower. In its shipment to him the handle is broken; he may mend or replace that. When he first attempts to use the machine, it runs against a stone and one of the cutting blades is injured; he may take that out and repair it. After awhile, when, under continued use, the blades become dull, he may

take them out and sharpen and refit them, and may even put new blades in their place. All this is *repair*, and it is *incidental* merely *to the use of the machine*.

But let us look at another class of cases.

The patented thing is an improved rifle cartridge formed by the *combination* of a *metal shell* and its contained *explosive* with a *ball* of peculiar construction. In the *use* of this appliance two elements of the combination, to wit, the explosive and the ball, *are destroyed and intended to be destroyed*, Could it be maintained, for a moment, that a purchaser of such a cartridge could, after firing the cartridge and deliberately destroying the patented combination, *refill* with explosive the empty shell, and *make and apply* a *new ball*, and justify, on the ground that he had only exercised his right of repair? Surely not, for here the alleged *repair* amounts to *reconstruction*. By the firing of the cartridge the patented combination sold *ceased to exist*, and the owner of the patent, and he alone, under his exclusive right to *make*, had the right to use any of the materials of the old cartridge to form *anew* the patented combination.

From these illustrations, this clear line of distinction between repair and reconstruction will be perceived. *Repair* takes place *during the use and in aid of the use* of the patented combination, while *reconstruction* occurs *after the combination is entirely destroyed and at an end.*

The one *supports and maintains a combination already existing* the other *makes the combination anew.*

The Case of Cotton Tie Co. vs. Simmons, 106 U. S.

In the above entitled case, the invention involved was a cotton bale tie, consisting of a metal band of sufficient length to encircle a bale of cotton and a peculiarly shaped slotted buckle, so contrived as to secure and hold the ends of the band when

the band was passed around the bale. The claims of one of the patents sued upon covered the *combination of the band and buckle,* and read as follows:

3. The combination of an open slot for introducing the band sidewise, with a link having a single rectangular opening for holding both ends of a metallic band, and the band.

4. An open slotted link, when combined with metallic bands, the ends of which are turned under the link and held in position by the expansion of the bale.

It was proved that the ties, consisting of the buckle and the band, were purchased from the owners of the patents and placed around the cotton bale on the plantation or at the cotton press. They remained on the bales till they reached the cotton mill, where the bands were cut and the buckles and pieces of band were thrown into the scrap heap and sold as scrap iron. The defendants bought up these old buckles and severed bands and straightened out the pieces of band and riveted them together to form new bands and then sold the new bands and buckles, *as complete ties,* to their customers. For this they were charged with infringement.

They contended that, by the sale of the original ties, the owners of the patents had parted with all property in said ties, and that the piecing together of the severed bands was simply the exercise of the purchaser's right of *repair;* but the Supreme Court took a decidedly different view of the matter and found infringement.

In delivering the opinion of the Court, Judge Blatchford said:

A buckle without a band will not confine a bale of cotton. Although the defendants use a second time buckles originally made by those owning the patents and put by them on the market, they do not use a second time the original bands *in the condition in which those bands were originally put forth with such buckles.* They use bands made by piecing together the severed pieces of the old bands. The band, in a condition fit for use with the buckle is an element in the third claim of the Brodie reissue. That claim is for a combination of the open slot arranged to allow of the sidewise introduction of the band,

the link or buckle with the single rectangular opening arranged so as to hold both ends of the bands and the band. * * *

Whatever right the defendants could acquire to the use of the old buckle, *they acquired no right to combine it with a substantially new band, to make a cotton-bale tie.* They so combined it when they combined it with a band made of the pieces of the old band, in the way described. What the defendants did in piecing together the pieces of the old band *was not a repair of the band or the tie, in any proper sense.* The band was voluntarily severed by the consumer at the cotton-mill, *because the tie had performed its function of confining the bale of cotton in its transit from the plantation or the press to the mill.* Its capacity for use *as a tie* was voluntarily destroyed. As it left the bale it could not be used again *as a tie.* As a tie, the defendants reconstructed it, although they used the old buckle without repairing that. The case is not like putting new cutters into a planing-machine in place of those worn out by use, as in Wilson *vs.* Simpson, 9 How., 109. The principle in that case was, *that temporary parts wearing out in a machine might be replaced to preserve the machince, in accordance with the intention of the vendor, without amounting to a reconstruction of the machine.*

We regard this cotton tie case as entirely controlling of the one at bar. It even goes farther than the latter demands.

In the cotton tie case, the entire patented combination, the combined buckle and band, was sold; here, the entire patented combination, the paper and the fixture, is sold. There, as here, the *destruction of the combination* was the *necessary result of use.* There, as here, the combination was intentionally destroyed by the user. There, as here, the combination was destroyed by the *destruction of one element.* There, the destroyed element, the cut band, was *susceptible of further use*; here the destroyed element, the paper roll, *is practically annihilated* and *of no further use whatever.* There, it was possible to make the combination anew *from the old material*, here, such a remaking of the combination is *impossible.*

Under that decision, it is clear that purchasers who buy directly from the appellant the patented combination, *i. e.*, the Oval King paper combined with the Oval King fixture, are not at liberty, after the purchased combination is destroyed *by the*

consumption of the paper furnished them, to make combination anew by putting together the old fixture and new rolls of paper *made by them or furnished by some one else*, without the consent and allowance of appellants; and every such remaking of the combination is an act of infringement.

By buying from Appellant the Combined Fixture and Roll, Purchasers acquired no right by implication or otherwise, to supply themselves with Additional Paper Rolls with which to Remake the Patented Combination.

Cases have arisen in which the sale of a machine or appliance, embodying a patented combination, has been held to confer upon the purchaser the right to replace an element of the combination that has become *worn out or broken* in the ordinary use of the machine and its replacement is made necessary to enable the machine, as a whole, to perform the work it was designed and intended to perform, and for which it was purchased. Such was the ruling in the leading case of Wilson *vs.* Simpson, 9, How., 109. In that case the invention involved was the celebrated Woodworth planing machine, and the patent sued upon covered the combination with the cutting knives or planes, of the pressure roller, or an analogous device, to effect the planing of planks. It was proved that one of the Woodworth machines properly made would last in use for several years, but that its *cutting knives* would *wear out* and would have to be replaced at least every sixty or ninety days.

Defendant bought a machine, and when the knives *wore* out, replaced them by others of his own manufacture and continued the use of the machine. For this refitting of the machine he was sued as an infringer and found not liable.

Mr. Justice Wayne in delivering the opinion of the Court, said:

We admit, for such is the rule in Wilson *vs.* Rousseau, 4 How., that when the material of the combination ceases to exist, in whatever way that may occur, the right to renew it depends upon the right to make the invention. If the right to *make* does not exist, there is no right to rebuild the combination. But it does not follow, when one of the elements of the combination has become so much worn as to be inoperative, or has been broken, that the machine no longer exists for restoration to its original use, by the owner who has bought its use. When the wearing or injury is partial, the repair is restoration and not reconstruction.

Illustrations of this will occur to any one, from the frequent repairs of many machines for agricultural purposes, also from the repair and replacement of broken or worn out parts of larger and more complex combinations for manufactures.

In either case, repairing partial injuries, whether they occur from accident or from wear and tear, is only refitting a machine for use, and it is no more than that, though it shall be a replacement of an essential part of a combination.

It is the use of the whole of that which a purchaser buys when the patentee sells to him a machine, and when he repairs the damages which may be done to it, it is no more than the exercise of that right of care which every one may use to give duration to that which he owns or has a right to use as a whole.

* * * * * * *

The right of the assignee (purchaser) to replace the cutter knives is *not because they are of perishable materials*, but because the inventor of the machine has so arranged them as a part of its combination, that the machine could not be continued in use without a succession of knives at short intervals. Unless they were replaced the invention would have been of but little use to the inventor or to others.

From the whole opinion of the Court, and especially from the parts of it above quoted, it is clear that the defendants' right to *replace* the *worn out cutters* grew out of the peculiar character of the invention and of the nature of the understanding which seller and purchaser must have had at the time of the sale.

The machine was bought to *plane boards*, and not to wear out cutters. There was not the slightest *intention* that any part of it should be destroyed while it was being used as designed and intended to be used, that is to say, *planing boards:*

but it was appreciated that, in the nature of things, the cutters would soon *wear* and have to be sharpened and resharpened until finally they become so *worn* as to be required to be *replaced* by new ones. The wear of the cutters was *incidental to*, and not the *object* of, the use of the machine. The refitting of them was *repair* and not reconstruction, and the purchaser was justified in regarding such refitting as falling within his his *right of repair*.

But how different the present case, and the cotton tie case. The paper roll in the one, and the metal band in the other, are elements of the combination *intended and designed to be destroyed in the use of the thing sold*. There is nothing *incidental* about it. If the core plate of the fixture should break or the pivot pin should be lost, the purchaser would, undoubtedly, have the right to mend the one or replace the other, because that would only be *refitting* the part to act as it was intended by the seller it should act ; but with the roll of paper it is different. *That is purposely and deliberately destroyed by the purchaser*. When it becomes used up, *the purchased combination is at an end;* has lived its life, and is dead. To combine another roll of paper with the fixture is *not restoration, but reconstruction*. About this, we think, there can be no two opinions.

So, in the case of the cotton tie, if the metal band should become broken in transit and before it fulfills its mission, it might be *mended;* that would be repair ; but when it arrives at the mill and is *deliberately severed*, the combination becomes as effectively destroyed as the rifle cartridge combination does by the explosion.

In the decision of the cotton tie case, Wilson *vs.* Simpson was fully considered and the same distinctions we have above attempted to elaborate were made.

The Court said (p. 94):

> The band was voluntarily severed by the consumer at the cotton-mill because the tie had performed the function of confining the bale of cotton in its transit from the plantation or

the press to the mill. Its capacity for use as a tie was voluntarily destroyed. As it left the bale it could not be used again as a tie. As a tie the defendants reconstructed it, although they used the old buckle without repairing that. The case is not like putting new cutters into a planing machine in place of those worn out by use, as in Wilson *vs.* Simpson, 9 How., 109. The principle of that case, was, *that temporary parts wearing out in a machine might be replaced to preserve the machine in accordance with the intention of the vendor*, without amounting to a reconstruction of the machine.

After the above expression of opinion by the Supreme Court, we think there can be no doubt as to what was decided in Wilson *vs.* Simpson.

Appellants never sold fixtures unrestrictedly ; it was always understood that they were only to be used with appellant's paper.

Appellant's *invariable rule* was, as we have seen, never to sell fixtures without paper, and it was always understood that purchasers who desired more paper for use with the fixtures were to have the right to get it only of appellants. (Morgan, p. 71; Day, p. 137.)

Appellees have shown no single instance in which fixtures were purchased without paper, or of a sale of fixtures by appellants without restriction.

This state of the evidence ought to be sufficient to repel any presumption of license to the purchaser to get new rolls of paper of whomsoever he pleased.

The Existence of the Roll Patent Negatives any Inference of Implied License to Remake the Patented Combination.

If, however, it could be said that an *implied right to reconstruct* the patented combination by the employment of other rolls then those purchased from appellant with the metal fixture, grew out of the sale of the combined roll and fixture, *such implied or constructive right would be completely negatived*

by the fact that the paper roll is, itself, a patented article, of which circumstances the purchaser of the combination had not only constructive but *actual notice*, for every roll of paper sold by complainants bore the date of the roll patent, as well as the date of the combination patent and appellants' name as owners of both patents.

The liability of a person who undertakes, *under the guise of an implied right to repair*, to restore the separately patented element of a patented combination when the original element has been worn out or destroyed, has always been recognized.

In the very case of Wilson *vs.* Simpson, we have been considering, the Court uses this language:

"Of course, when we speak of the right to restore a part of a deficient combination we mean the part of one entirely original, and not of any other patented thing which has been introduced into it to aid its intended performance."

So, too, in the case of Aiken *vs.* Manchester Print Works, 2 Cliff., 435, it was held that, where a person had purchased of the owner of the invention certain knitting machines with which the vendor was accustomed to send a package of the needles used in the same, the sale of the machines did not carry with it a right to the purchaser to manufacture for use in the machine new needles of the same construction as those sold him when those he had bought were worn out, *although the machine could not be operated without them*, and the needles were the patented invention of the seller, the needles being the subject matter of a different patent from that covering the machine.

Judge Clifford, in his opinion in this case, said:

"The indisputable right of the defendants is to repair or improve the articles as long as they will last, but they cannot make new ones, nor can they, in the exercise of their right to repair the old ones, infringe another man's patent. Right to repair is limited by the same rules that operate in the repair of other property. The owner may repair, but he cannot appropriate the materials belonging to another man in effecting the

purpose. Purchasers in this case may repair the needles they purchased, but they cannot manufacture new ones without license."

Reference is made to the case of Wilson *vs.* Simpson, 9, How., 123, but a careful examination of the case will show that it affirms the very rule here maintained.

"When we speak of the right to restore a part of a deficient combination, we mean," says the court, "the part of one entirely original, and not of any other patented thing which has been introduced into it to aid its intended performance. The cutters and knives, in that case, were not subject to a patent, and, of course, the respondent had a right to use them as materials to repair his machine, but unfortunately for the defendants in this case the needle is subject to a patent and in making and using it they have infringed the right of the plaintiff."

See, also, Singer Co. *vs.* Foundry Co., 34 Fed. Rep., 394.
Young *vs.* Forester, 37 Fed. Rep., 203.
Walker on Patents, 2d Ed., par. 301.

The Existence of the Roll Patent, whether Valid or Invalid, Repelled any Inference of License to Make Anew the Combination.

For the purpose of repelling the implication of license to reconstruct the patented combination, it is entirely immaterial what the purchaser thought of the patent on the paper roll; whether he thought it sound or unsound. The patent stood as a valid patent, and he knew when he bought the combination that the appellants had a patent on the paper, and claimed the exclusive right to furnish him more paper when the supply sold as a part of the combination should become exhausted. This completely negatives all idea of any implied right to renew the combination.

Appellees do not Occupy the Position of Purchasers from Appellant.

So far, we have discussed the question of infringement of the combined roll and fixture patents as if this suit had been brought against a purchaser who had bought the combined roll and fixtures directly from appellant and claimed the right to use the fixture, further, with paper of his own manufacture, thus, putting the case as strongly as possible against the appellant, but, as a matter of fact, the real infringers—the appellees—have never occupied that relation to appellant.

There is no evidence that they ever bought a single roll or a single fixture, or a single combined roll and fixture from appellant or any agent of appellant. They have simply been engaged in buying up fixtures of the Oval King pattern whenever and from whoever they could, and have sold them again, combined with oval rolls of paper of their own manufacture; and they have also, and in this their chief liability consists, hunted out those who lawfully purchased the patented combination, *i. e.*, the combined roll and fixtures, from appellant, and supplied them with a cheaper and poorer grade of oval rolls, of their own manufacture, so that such purchasers might, and with the intention that they should, *reconstruct the patented combination* after the paper rolls bought from appellant, and forming the essential element of such combination, had been consumed. In other words, they have been and are engaged in a conspiracy to infringe the two combination patents, and have been and are reaping that profit from the sale of the oval paper which belongs exclusively to appellant. There is no argument about "innocent purchasers" that they can avail themselves of. They knew of the existence of appellant's patents on both the roll and on the combination of roll and fixture, and not only had knowledge of the printed notice ("Exhibit M," p. 162) sent out by appellant to the trade and to all buyers of toilet paper, appraising them of the appellant's claim

of exclusive rights under the patents in suit (Wheeler, p. 61), but issued a printed reply to said circular ("Exhibit O," p. 163), which was extensively circulated (Wheeler, p. 60).

The Doctrine of Contributory Infringement.

By making and selling the oval rolls of paper for use by others upon the Oval King fixtures, the appellees furnish an essential element of the combination covered by appellant's patents, Nos. 325,174 and 357,993, and are equally liable with the user of such combination as infringers of said patents. Every essential ingredient is present to fix their liability.

1. Their rolls are made of the same dimentions as those made by appellant (Wheeler, p. 49).

2. Their rolls are made to fit the Oval King fixtures of appellant (*Ibid.*)

3. Their rolls are made and sold with the admitted intention that they shall be combined with Oval King fixtures by the purchaser (*Ibid.*)

4. Their rolls are called "Oval King Rolls," in imitation of the trade name adopted by appellant (Morton, p. 20).

5. And when parties order "Oval King" rolls for use on Oval King fixtures, they furnish their own rolls as answering that designation, and for the purpose of use on said fixtures (Wheeler, p. 52).

6. They know that appellant claims the exclusive right to furnish oval rolls of paper for use in the Oval King fixtures, yet, notwithstanding this fact, and in utter disregard of appellant's protests, they continue such unlawful manufacture and sale.

The leading case on the subject of contributory infringement is that of Wallace *et al. vs.* Holmes *et al.*, 5 Fish., 37. The patent in suit was for the combination of a lamp burner with a chimney. Defendants made and sold the burners without chimneys, and purchasers bought the chimneys and combined and used them with the burners. The defendants were held liable.

In delivering the opinion of the Court, Judge Woodruff said (p. 47):

"It cannot be that where a useful machine is patented as a combination of parts, two or more can engage in its construction and sale and protect themselves by showing that, though united in an effort to produce the same machine and sell it, and bring it into extensive use, each makes and sells one part only, which is useless without the others, and still another person, in precise conformity with the purpose in view, puts them together for use.

"If it were so, such patents would indeed be of little value. In such case, all are *tort feasors* engaged in a common purpose to infringe the patent, and actually, by that concerted action, producing that result. In a suit brought against such party or parties a question might be raised whether all the actors in the wrong should be made parties defendant, but I apprehend that, even at law, and certainly when non-joinder was not pleaded, the want of all parties would be no defense. *Each is liable for all the damages.*

In Richardson *vs.* Noyes, 2 B. & A., 400, the patent covered the combination with a children's carriage, of bars or standards pivoted to the sides of the carriage body and a top pivoted to said bars or standards, and the defendants were charged with making and selling a part of the combination. Judge Lowell used the following language in disposing of the case:

"Do the defendants infringe the Bein & Ulrich patent? We find that they do. They make only the standards for children's carriages; but it is admitted that they are made and sold to the carriage builders for the express use to which they are put, that is, for children's carriages, and it is not denied that this makes them in law infringers, if their standards, when combined with the carriages in the mode in which they are designed to be combined, infringe the patent. Upon this point it seems to us that the defendants use standards which embody the Bein & Ulrich improvement."

In Bowker *vs.* Dows, 3 B. & A., 518, Lowell, J., the patent covered the combination of saponine with syrup, mineral waters, etc. Defendant made saponine and sold it with directions how to use it in combination with the articles mentioned.

He was held to be an infringer. This case was cited with approval in Holly *vs.* Vergennes Machine Co., 4 Fed. Rep., 82

In Travers *vs.* Beyer *et al.*, 26 Fed. Rep., 450, Wallace J., the claim in suit was:

"The combination of a hammock A, having suspension ropes, f, f, with detachable distending blocks g, g, which are notched at their lower edge to space said ropes f, f, substantially as specified."

The defendants made and sold the "distending blocks" to manufacturers of hammocks who, in turn, sold them with or without the hammocks, at the option of the purchasers.

Judge Wallace said, in deciding the case:

"They are making and putting upon the market an article which, of necessity, to their knowledge, is to be used for the purpose of infringing the complainant's patent. They thereby concert with those to whom they sell the blocks to invade the complainant's rights. They are intentional promoters of the ultimate act of infringement."

See also—

Cotton Tie Co. *vs.* Simmons, 106 U. S., 89.
Willis *vs.* McCullen, 29 Fed. Rep., 641.
Holly *vs.* Vergennes Machine Co., 4 Fed. Rep., 74.
Schneider *vs.* Missouri Glass Co., 36 Fed. Rep., 583.
Schneider *vs.* Pountney, 21 Fed. Rep., 399.
Celluloid Co. *vs.* Zylonite Co., 30 Fed., Rep., 437.
Alabastine Co. *vs.* Payne, 35 O. G., 1438.
Rumford Chem. Works *vs.* Hecker, 2 B. & A., 351.
Terrell *vs.* Spaeth, 8 O. G. 986.
Saxe *vs.* Hammond, 1 B. & A., 629.
Roosevelt *vs.* Western Electric Co., 7 Fed. Rep., 724.
Snyder *vs.* Bunnell, 38 O. G., 1130.

The Combination Patents Are for Distinct and Separate Inventions Within the Rule Laid Down by this Court in Miller et al. vs. Eagle Manufacturing Company.

As hereinbefore explained, the two combination patents, Nos. 325,174 and 357,993, are for distinct and separate inventions, and this is true, notwithstanding the fact that a single structure may embody the substance of both inventions or of either one.

The earlier of the two patents, No. 325,174, covers certain definite combinations of which a cutter forms an essential element.

Patent No. 357,993 includes certain combinations of which a stop is an essential element.

The drawings of the two patents represent the same structures as illustrating not the only but "the best mode in which he (the inventor) has contemplated applying that principle" for which he sought a patent. (R. S., § 4888.)

It will be observed, however, that the patents each disclose two forms of embodiment, the one in which the cutting and stopping functions are performed by the same device, to wit, the cutter, and the other, in which the stopping function is entirely independent of the cutting, as represented in figure 6 of the drawings.

Under the practice in the Patent Office both of these forms of embodiment could not be secured in one patent because they represented separate inventions, and this fact is emphasized and illustrated by the granting of the patent on the cutter form (No. 325,174) and the declaration of interference proceedings on the stop form, the interfering application containing the stop, but not cutter.

The line of demarkation between the cutter and stop forms is clearly set forth in patent No. 325,174, wherein those

features and functions pertaining to the stop as distinguished from the cutters, are disclaimed and specifically reserved for the later patent on the stop, No. 357,993.

The mere circumstances that the stopping and cutting functions are capable of being combined in one structure and are so shown does not *ipso facto* establish that they are one and the same invention, for if the bar M was not provided with a cutting edge, the cutting function would not be performed nor would the structure fall within the claims of patent No. 325,174 because of the omission of the cutter.

So, too, if the device shown in figure 6 of the patent was employed, with the pin on the roll engaging a shoulder on the arm of the fixture, the stopping functions would all be performed, but none of the cutting functions would be developed.

It thus appears that two embodiments are shown in each patent, one including a combined cutter and stop, and the other a stop without a cutter, and that the device containing the combined cutter and stop is patented in No. 325,174, while that containing a stop alone is patented in No. 357,993.

The case thus presented is not one in which the second patent differs from the first merely in the scope of its claims, but it is one in which "the second patent covers matters described in the prior patent, essentially distinct and separable from the invention covered thereby and claims made thereunder," it distinctly appearing "that the invention covered by the later patent was a separate invention, distinctly different and independent from that covered by the first patent;" or, in other words, it is "something substantially different from that comprehended in the first patent."

MELVILLE CHURCH,
J. B. CHURCH.
Counsel for Appellant.

Chas. E. Mitchell.

Office Supreme Court U. S.
FILED.
MAR 3 1894
JAMES H. McKENNEY,
CLERK.

Supreme Court of the United States,

OCTOBER TERM, 254.

MORGAN ENVELOPE COMPANY,

Appellant,

vs.

ALBANY PERFORATED WRAPPING COMPANY ET AL.,

Appellee.

APPEAL FROM THE CIRCUIT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF NEW YORK.

BRIEF FOR APPELLEE.

ESEK COWEN,
Counsel for Appellee.

Evening Post Job Printing House, New York.

Supreme Court of the United States.

MORGAN ENVELOPE COMPANY, Appellant, vs. ALBANY PERFORATED WRAPPING COMPANY *et al.*, Respondent.	October Term, 1893. No. 254.

This is an appeal from a decree of the Circuit Court for the Northern District of New York. The action was brought to obtain an injunction and damages for an alleged infringement upon three patents originally granted to Oliver H. Hicks and assigned to the complainant. One of these patents was for what is called in the testimony an "oval roll" of toilet paper, and is dated September 1, 1885, and numbered 325,410. The second patent is for a "toilet fixture," dated August 25, 1885, and numbered 325,174. The third patent is for "Toilet Apparatus," and is dated February 15, 1887, and numbered 357,993. The Court below dismissed the complaint as to patents Nos. 325,410 and 325,174, and sustained the fifth claim of Patent No. 357,993, as to which it held there was an infringement, and ordered the usual judgment for an injunction and accounting. The defendant acquiesced in this judg-

ment and did not appeal. The complainant took an appeal to this Court. The original record not having contained the documentary exhibits, an additional record is printed, and the two records will in the course of this brief be designated as R. and A. R.

Two of the patents being for fixtures, it is more convenient to take up first the patent for the "Oval Roll." As to that patent the state of the art is fairly represented by the patent granted to J. F. Peacock which will be found on page 67 of the additional record. That invention shows a roll of toilet paper, of an oval shape, which is placed, for convenience, in a case, and evidently intended to be carried in the pocket. Though apparently smaller than the "oval roll" of the Hicks patent, it comes directly within the language of the claim, and is as the Court finds, a complete anticipation. It was certainly no invention to use Peacock's roll without the case.

The patent numbered 325,410 is not printed in the complainant's record, but will be found in A. R., page 38, as a part of the file wrapper and contents, which were put in evidence by the defendant. The first thing that will occur to the Court, upon reading the patent, is that the *oval shape of the roll is no part of the invention claimed.* It is quite true that the specification describes a roll of an oblong or oval shape, and mentions, at considerable length, the supposed advantages (rather imaginary) of this particular form of roll, and in his original application the patentee inserted a claim, in which he declared that he had invented and desired to secure a patent on a roll of this oval shape or form. The proposed claim will be found A. R., page 36, and is as follows:

"I claim as my invention, as a new article of manufacture, a bundle of toilet paper, consisting of one or more lengths of paper, formed into a flexible continuous band *of oblong or oval shape;* the short rounded ends of said band, serving as guides for de-

termining the proper points at which the paper is to be separated, in order to produce sheets of a size desirable for use, and affording also the most advantageous surface to tear the paper, substantially as described."

As will be seen (A. R., p. 37), the appellant then amended his application, by inserting as a second claim, "A bundle of paper, consisting of one or more lengths, *formed into a continuous band, whose internal diameter is greater than the thickness of paper*, substantially as described."

The office then rejected the first claim, above quoted, as indefinite, failing to point out any construction over any ordinary paper roll, and upon the patent of J. F. Peacock, to which I have referred; and the appellant acquiesced in this rejection, *and struck out from his claims, all reference to an oval roll or to its advantages.*

Then the office, for some inscrutable reason, proceeded to grant the second claim, which was as clearly covered by Peacock's patent as the other, and with or without reference to Peacock's patent, is utterly destitute of invention.

It will be seen that the present claim is not for an oval roll, is not for a roll of any particular shape, does not claim the advantages of an oval roll, as stated in the specification, and is, merely, for a band of paper, the internal diameter of which is greater than the thickness of the band. Under this claim any band of paper which comes within this definition is an infringement, *no matter what its shape may be or for what purpose used.* The internal diameter of the band is not only limited by the claim, but is also further limited by the specification, which declares that the patentee makes, "the internal diameter of the band, in cylindrical form, of not less than *twice the thickness of the band at any one point* (A. R., p. 39). Interpreted then, by the specification, the claim is for a band of oval, cylindrical or other shape, of which the internal diameter is not less than twice the thickness of the band at any one point. Any

one who makes such a band as that for any purpose, infringes this patent, if it is valid.

If I pick up half a dozen sheets of writing paper and roll them up in a band whose internal diameter is greater than the thickness of the band, for convenience in carrying them, I infringe this patent; a proposition which is too great an absurdity to be considered for a moment. If, however, the claim should be construed to mean an *oval* roll, and if such construction is not utterly inadmissable there is the same difficulty. The Peacock roll, as appears by the drawing, has an internal diameter more than twice the thickness of the band, and is a complete answer.

Again, the only reason suggested for the relation, between the diameter and the thickness of the band is this: The patentee claims that the pieces of paper, whether from the surface of the roll or from its centre, will be *of convenient length for use*, but it is clear that this depends *upon the size of the roll*, and as no size is made *essential*, though there is a preference expressed by the patentee, the patent is void for ambiguity.

The claim is clearly for a roll whose diameter is not less than twice the thickness of the band *when the roll is of such a size that the pieces of paper going once around such roll will be of convenient length.* No definition of convenient length is attempted. Indeed, it seems that the *preferable* size of the roll named in the specification does not produce a convenient length, as the plaintiff's expert says that the pieces of paper have to be folded or doubled, after they are torn off (R., fol. 127).

There is no limitation in the claim. Any band of the described construction is included, yet it is clear that a band with an internal diameter of half an inch would produce pieces too short for use; while a roll, with six inches internal diameter, would furnish pieces a great deal too long.

Mr. Chapin, the complainant's expert, claimed that rolls of other sizes than those preferably mentioned in the patent would be within the claim, but

admitted that he knew of no limit, and could not draw the line at which the roll would be of such size, as to be without the scope of the patent (R., fol. 154).

Another consideration is this. If this patent is valid, a device, perfectly innocent, and lawful, when purchased, may be changed into an unlawful infringement by simply using the roll, as it was intended to be used when made, and as such devices are ordinarily used. For instance, a dealer makes and sells a roll with an internal diameter of two inches, and in which the thickness of the band is two and one-eighth inches. The diameter, being less than twice the thickness of the band, such a roll would be no infringement until one-eighth of an inch of paper is wound off, at which time it becomes an infringement. The difference in the diameter of the roll would be one-quarter of an inch at the surface, and the length of the outside "convolution" would be three-quarters of an inch more than the first "convolution," within the claim, and the difference between the last piece of paper, that *did not* infringe, and the first piece of paper that *did* infringe, could not be measured by the most delicate instruments.

To say that there is any patentable difference between two strips of paper, one of which is three-quarters of an inch or less longer than the other when the patentability depends upon "convenient length," seems an absurdity. It is not possible, therefore, to see how this patent, which is *called* a patent for an "oval roll," but which is, in fact, merely a patent for a band of paper, having a certain relation, between its internal diameter, and the thickness of the band, can be sustained. It is not only anticipated as the Court below found, by the Peacock patent and by various rolls in public use long before the alleged invention, but there is nothing patentable in its nature.

It is conceded that there may be bands of paper in which the internal diameter is greater than the

thickness of the band and bands of paper in which the internal diameter is not less than twice the thickness of the band, which will not be within the scope of the claim. The test is, whether by the use of such band or roll, the piece of paper, forming the circumference of the roll, will be of convenient length, and there is *nothing in the patent to show what the inventor meant by convenient length.* Such a patient is too ambiguous and indefinite to receive the approval of this Court, even if there were any novelty in the subject matter.

TOILET PAPER FIXTURE, PATENT NO. 325,174.

The Court will find a copy of the specification of this patent on page 31 of the Additional Record. The construction of the patented device is as follows:

The fixture has a back-plate or board, adapted to be placed against the wall of a closet. From this back-plate, project two spring arms, which may be sprung apart for the purpose of admitting the core-plate between them. Each of the arms has a socket, or journal-box, to receive the pivot or journal of a revolving core-plate. This core-plate has a piv ot or journal on each side and is put in place by springing the arms away from each other so that the journals will enter the sockets of the arms. In front of this core-plate and upheld by the arms is a plate marked M, the lower portion of which has a cutting edge either plain or serrated. The operation is as follows:

An oval or elongated band of paper is placed upon this core-plate, which is then inserted between the two spring arms. The core-plate is weighted upon one side and hanging from the upper portion of the roll of paper is a free end, which can be seized by the operator or user. The user takes hold of the free end of paper and pulling it, revolves the core-plate and roll so that the top of the roll strikes the plate M. Then a continued pull upon the paper

draws it against the cutting edge of the plate M, which severs it, at that point. When the piece is torn off, the core-plate and roll revolve in the opposite direction and the free end falls down to be again seized by the operator.

The Court below held that this mechanism was novel and original with the patentee, and we have no fault to find with that conclusion.

The five claims of this patent are as follows:

1. "The combination, *with a weighted oscillating roll of toilet paper*, actuated in one direction by a pull upon its free end, *of a knife or cutter*, co-operating with said roll to sever the unwound portion when the roll has reached the limit on its motion in one direction, and a stop for limitidg the motion of said roll, substantially as described.

2. The combination, *with an oscillating roll of toilet paper* having its bearings out of line with its centre of gravity and actuated in one direction, by a pull upon its free end, of a stop *constituting a knife or cutter* for co-operating with said roll, to sever the unwound portion, when the roll has reached the limit of its motion in one direction, the eccentric hanging of the roll returning it, automatically, to its normal position, substantially as described.

3. The combination, *with an elongated or oval oscillating roll of toilet paper* actuated in one direction by a pull upon its free end, of a stop *constituting a knife or cutter*, co-operating with the roll to sever the unwound portion therefrom, when the roll has reached the limit of its motion, when so actuated, substantially as described.

4. The combination, with the supporting-arms, of a *stop-plate or cutter, extending between said arms*, and an oscillating core-plate having its bearings in said arms and adapted to hold a roll of paper, substantially as described.

5. The combination of the back plate, the supporting arms, *the plate forming the stop and cutter*, and the oscillating core-plate, the whole arranged and operating substantially as described."

As to these claims, we contend that the first three are for an unpatentable combination, and that none of them are infringed.

1. Each of the first three claims contains, as an element of the combination, "an oscillating roll of toilet paper," but this involves the unwarrantable assumption, that the *roll or band of paper is a part of the combination constituting the actual machine*, and this cannot possibly be true. The machine is constructed, and used, for the purpose of dividing a continuous roll of paper into convenient lengths for use. Is it true that the roll of paper, which is divided into convenient lengths, *is a part of the machine that divides it?* It may be stated, generally, that no substance, that is prepared by a machine for the use of man, can be considered a part of the machine which prepares it. All parts of the machine proper remain parts of it until they are worn out. The substance prepared is connected with the machine, for a temporary purpose, and when that purpose is effected, the connection ceases.

In the machine of this patent a roll of paper is inserted, used up, and replaced by another roll. In the interval between the exhaustion of one roll, and the insertion of another, has it ceased to be a complete machine? It is contended that the roll is part of the combination, because it is pulled forward so as to meet the knife. If that is any argument, then in every case where the substance, acted upon by the machine, is exposed to such operation by hand, the substance is part of the machine and can be included with other parts of the machine, in a mechanical combination.

Take the ordinary buzz, or ribbon saw, for cutting

wood. The workman places a piece of wood upon a carriage and pushes it to meet the saw. Is the wood a part of the machine which cuts it?

It seems to me, that when the Court below conceded that the inserting of a new paper roll, in the fixture was a *repair of the machine*, it conceded altogether too much to the complainant. We contend, therefore, that the first three claims of this patent are void, as not covering a patentable invention, and upon the well settled principle frequently declared by this Court, that the claiming of a particular combination of old devices is a concession that anything less than the whole combination, is not new, it would seem that there is no alternative but to hold these claims void.

2. If not void, no infringement of any of these claims has been proved. Two infringements are asserted by the complainant, one by selling what is called the "Universal Fixture," and the other by selling rolls, to be placed in fixtures, which had *been manufactured and sold by the complainant*. As to the first charge of infringement, every claim of the patent, as was properly held by the Court below, contains as an element, *the knife or cutter*, described in the specification. The Universal Fixture does not contain any knife, or cutter, or any equivalent thereof. That fixture consists of a back plate, to be placed against the wall, of a transverse bar, hinged to the plate, from which two vertical arms are suspended, and a core-plate is placed between those arms, as in the complainant's patent. The transverse bar, from which the arms are suspended, acts, in some cases, as a *stop;* that is, when the core-plate and paper roll are revolved, the upper portion of the roll, strikes against this bar and aids in tearing the paper, but the bar has no resemblance, whatever to a *knife or cutter*. It has no cutting, or serrated edge, and the paper is not cut but is torn. The patent does say that this plate M, with its cutting, or serrated edge, acts as a stop as well as a knife or cutter. This is

unquestionably true, but it is nowhere *claimed* as a stop, and the disclaimer in the patent necessarily confines the patent *to a stop with a cutting edge.* The language of the disclaimer is as follows (page 33, A. R.):

" Neither do I claim herein, broadly, the combination with an oscillating roll of toilet paper, actuated, in one direction, by a pull upon its free end, of a stop for arresting the roll, at the limit of its motion, when so actuated, either with, or without another stop, for arresting the motion of said roll at the limit of its oscillation in the opposite direction; nor do I claim herein such a combination " (that is, a combination of the oscillating roll and the stop) " wherein the roll is hung upon bearings, out of line with its centre of gravity, so as to automatically return it to its first position, after being turned by the pull of the paper; but I have made all such matters the subject of a separate application filed February 7, 1885, of which this is a division." So the patentee plainly precluded himself, from claiming a combination of the back plate, the supporting arms, the weighted core-plate, with its roll of paper, and the stop. There was nothing left to claim, except a combination containing the stop, acting as a knife or cutter, and for that reason the knife or cutter is made an element of every claim. No knife or cutter being used, in the Universal Fixture, these claims have not been infringed by that machine.

3. An infringement of this patent is also claimed, from the fact that the defendant solid oval rolls of paper *with fixtures that had been manufactured by the complainant or to persons using fixtures so manufactured.* That this was the case, was proved, on page 183 of the record, at folios 282 and 283. Also page 64 of the record, folio 99, It is claimed that selling these rolls of paper to be used with the fixture of the complainant, which had

been sold by the complainant to other parties, or selling this fixture, so manufactured by the complainant, with rolls of paper was "contributory infringement." There are two answers to this suggested. One is, that the machine, *without the paper roll*, having been once sold by the complainant, its use was no infringement, and that the complainant could not establish an infringement, *because the roll is no part of the machine*, and placing it in the machine does not complete a patentable combination. In the next place, assuming that the placing of a new roll of paper in the machine is a *repair*, it is such a repair as the purchaser of the machine has a right to make. It is impossible not to see that both parties to the sale must have contemplated that the paper roll would be speedily used up and that an indefinite number of rolls could and would be used with the machine. It can hardly be supposed that their intention was to confine the purchaser to one roll, or to rolls made by the complainant. If so, then the purchaser of every patented machine must buy of the owner of the patent all the raw material which is divided, shaped or fashioned by such machine for use whenever the patentee chooses to make such material a part of the patented combination. Startling conclusions follow from this proposition. For instance, in case of this patent: Suppose the complainant should cease manufacturing and selling paper rolls, then all the fixtures sold would have to be thrown away, as the owners could not buy rolls of anybody else, without infringing the patent. Or if the complainant should refuse to sell more than one roll with a fixture, and compel the unhappy customer to purchase a new fixture with each new roll, it would still be within its legal rights. That such a thing is not likely to be done, by any prudent business concern, is very probable, but the illustration tests the principle.

I cannot persuade myself that the patentee of a saw, as above suggested, even if so sagaciously advised, as to claim the log, or plank, or board, to be

sawed, as a part of his patented combination, could, in this ingenious way, compel his customers to buy all the lumber they used of him.

One cannot be guilty of a "contributory infringement," *unless there is an infringement, by some other person*, to which he can contribute. Parties in possession of machines manufactured and once sold by the complainant had a right to use those machines until they were worn out, and as they could not use them, as they were intended to be used, without placing, in the machines, rolls of paper, to be divided into convenient lengths, it is impossible that procuring such rolls, of other parties than the patentee, should be outside of the license implied by the purchase of the machine.

Toilet Apparatus, Patent No. 357,993.

This is a division of the application for the patent last discussed, No. 325,174, and has the same drawings and relates to all the features of the alleged invention not claimed in the former patent. Prior to this invention a fixture called the "Albany Fixture" was in public use, which contained a round core and a roll of paper hung eccentrically, and with a limited motion, as is stated by Judge Wallace in his opinion. The only difference between this Albany Fixture and the fixture of the patent which is now considered, was, that it was not so constructed that the end of the core-plate would strike the stop. There was a back plate, there were arms, there was a core so weighted and hung that when the length of paper was divided from the roll, it would fall back into its former position, and there were means for limiting the motion of the core and roll, but it did not contain the precise construction of a core-plate and stop, so placed that upon pulling off a length of paper the top of the core-plate or roll would strike the stop (page 40 of the Record, fol. 65). The patent will be

found in the Additional Record at page 64. The claims on page 66 are as follows:

1. "The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby upon the arrest of the roll a portion unwound from it may be removed, substantially as described." This is a claim for the combination of an oscillating roll of toilet paper with a stop, and was old long before the application for this patent was made.

2. "The combination, with an oscillating roll of toilet paper actuated in one direction by a pull upon its free end, of stops for arresting the roll at the limit of its motion when so actuated, and also for arresting the motion of said roll at the limit of the oscillation in the opposite direction, substantially as described.

3. "The combination, with an oscillating roll of toilet paper having its bearings out of line with its centre of gravity, and actuated in one direction by a pull upon its free end, of a stop for arresting the roll at the limit of its motion when so actuated, whereby when the roll has been arrested and the length of paper removed the roll will automatically resume its normal position, substantially as described."

There is the same objection to this claim as to claim 1; that is, that the combination of an oscillating roll and stop was not novel.

Infringement of the fourth claim was not urged in the Court below.

It will be seen that in each of the first three claims the oscillating roll of paper is a part of the combination, and I have already given the reasons why such a combination is not patentable. No specific form of core-plate is mentioned in any of these first three claims, and there is nothing in any of the claims to

confine it to a flat core-plate and stop constructed so that the upper portion of such core-plate cannot pass the stop. The language would be equally applicable to a round or square core-plate, whose motion was arrested by any kind of a stop.

The fifth claim was held by Judge Wallace to be infringed by the Universal fixture of the defendant. While a good many reasons might be urged to show that the learned Judge was in error in this holding, it has not been thought worth while to appeal from that portion of the decree, and, therefore, no question as to its soundness can be raised here. The decree of the Court below was certainly favorable enough to the appellant and it should be affirmed.

ESEK COWEN,
Counsel for the Appellee.